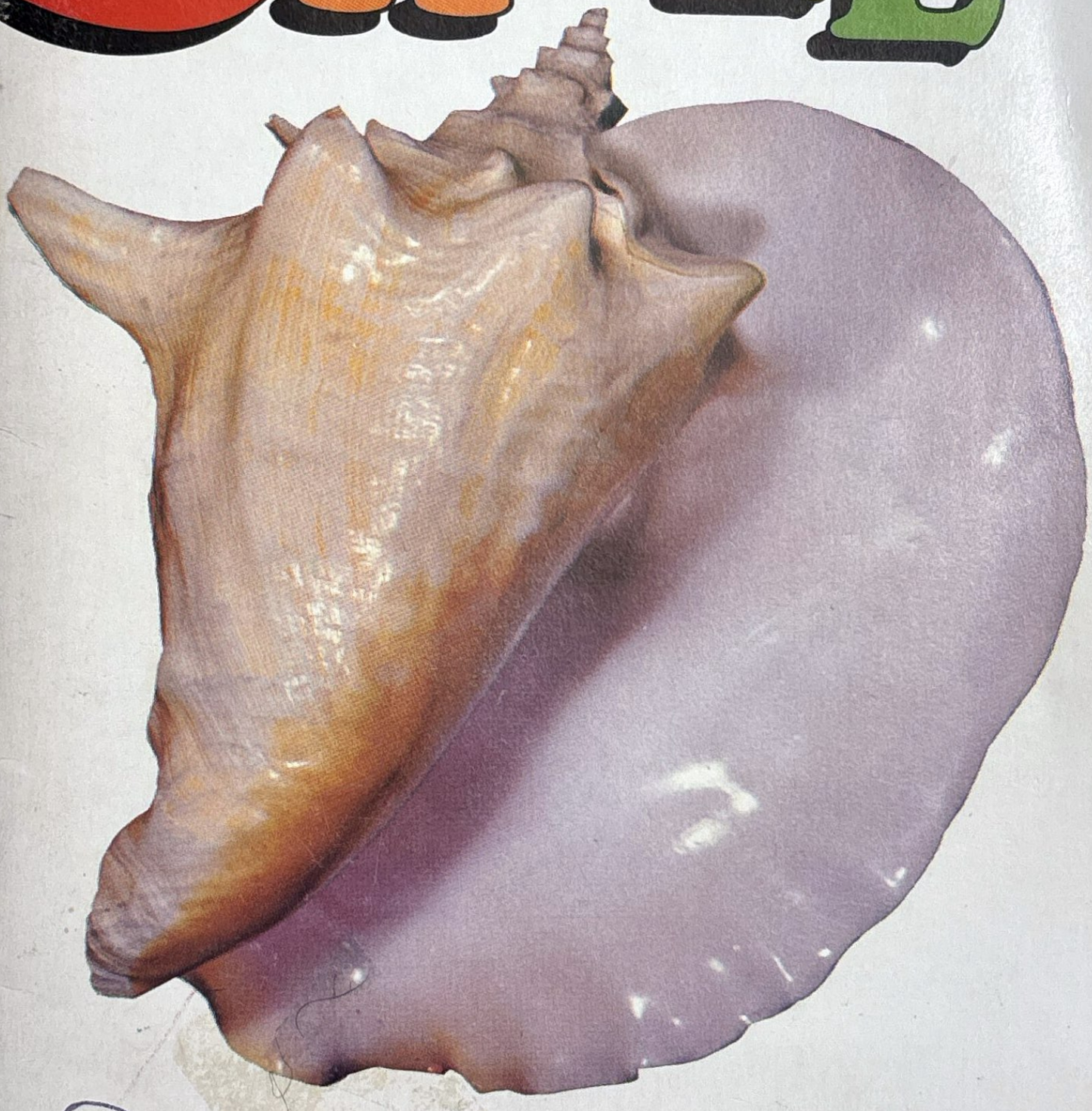
Handbook of Kelly [redacted]

SHELLS



Sea Shells of the Gulf and Atlantic Coast

Kelly R.

5-B

Kelly Ruiz xx

Handbook of

SHELLS

Kelly Ruiz

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by
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Interesting Facts About Shells

Seashells are divided into two classifications:

Univalves — Bivalves

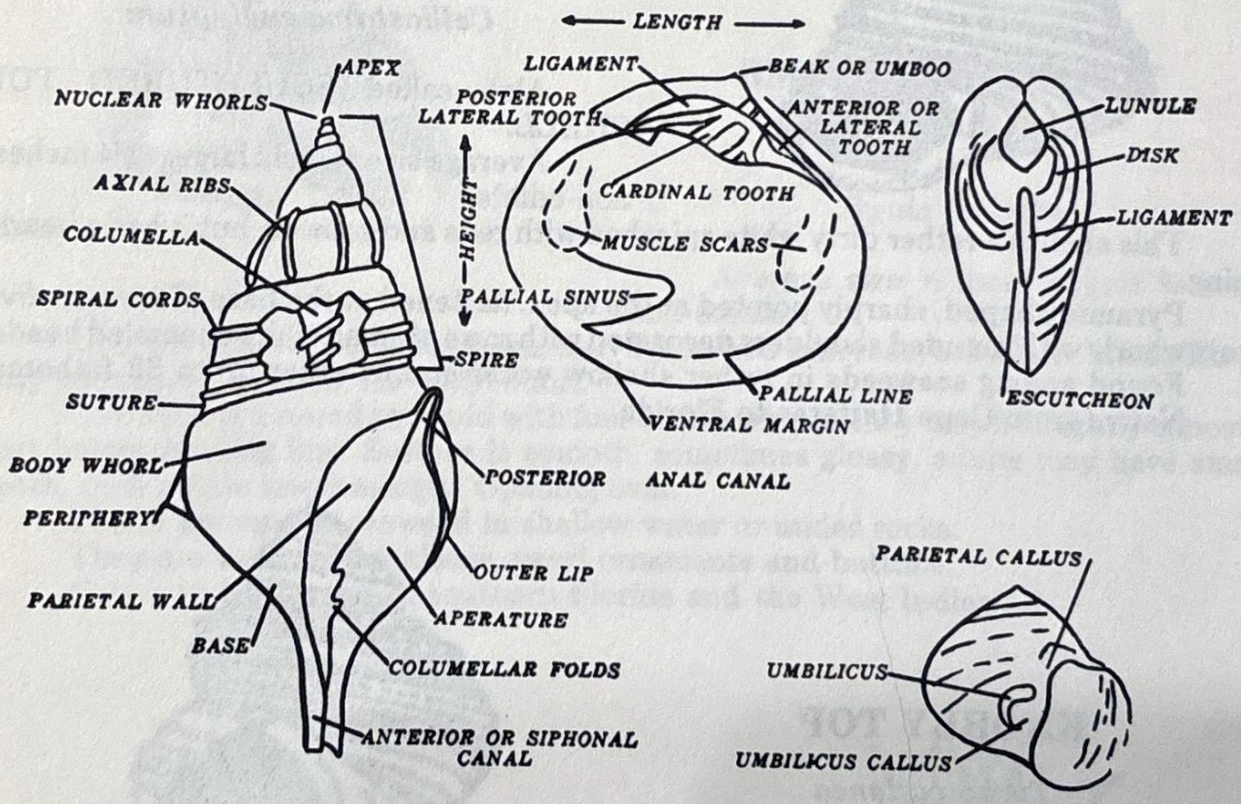
Shells grow in all sizes, shapes and colors. All shells have life in them. Most of them grow by secreting a calcium carbonate from special glands located along the edge of the fleshy mantle of the animal.

To clean a shell; it should first be scrubbed with soap and water; the animal boiled and removed; then soaked in chlorine to whiten the shell or to remove the outer skin or periostracum.

Shells are found from shallow to deep water, under rocks, in mud, on seaweed, burrowed in corals or wood, in clean sand or on bushes, pilings or seawalls.

We get some of our best seafood from the shells, namely — clams, oysters, and scallops.

Nearly all shells are found occasionally in a rare, pure white or albino form. They are not bleached or faded, but are pure white naturally.



UNIVALVES

About 75% of all the shells are univalves, which means one shell, spiral in form. The animal in this shell is usually carnivorous and bores holes in other shells by means of a long tongue or radula which consists of many rows of very sharp teeth.

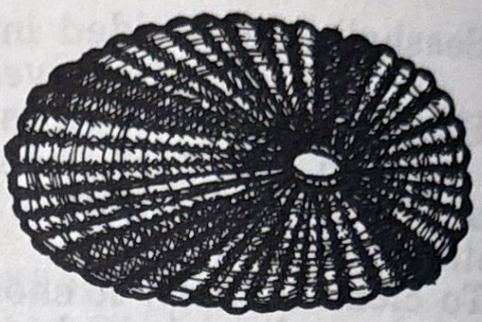
BIVALVES

The bivalve means two shells like a clam. These shells are joined together by a hinge. The bivalve gets its food by means of two tubes that constantly siphons water in through one tube and out the other. Most bivalves feed on algal cells and diatoms.

Top Shells

CAYENNE KEYHOLE LIMPET

Diodora cayenensis



Average size 1 inch; largest 2 inches; non-edible.

Whitish-gray to dark gray. Inside white.

Many radial ribs with each fourth one larger. Deep pit just behind the callus of the orifice on the inside.

Many times found attached to stones or under stones.

Native to the Atlantic coast from New Jersey to Brazil.

FLORIDA TOP SHELL

Calliostoma euglyptum

Also called SCULPTURED TOP SHELL.

Average size ¾ inch; largest 1¼ inches; non-edible.

This shell is a rather dirty white splashed with reds and browns, but it has a pearly lining.

Pyramid shaped, sharply pointed at the apex, flattened at the base. There are five or six whorls with rounded shoulders decorated with rows of small white enameled beads.

Found among seaweeds in rather shallow water and in water up to 32 fathoms.

Native from Cape Hatteras to Florida.

KNOBBY TOP

Turbo castanea

Also called CHESTNUT TURBAN.

Average size 1 inch high; largest 1½ inches; edible.

Usually light brown blotched with darker brown; occasionally dull green or gray or orange, with white spots; interior pearly.

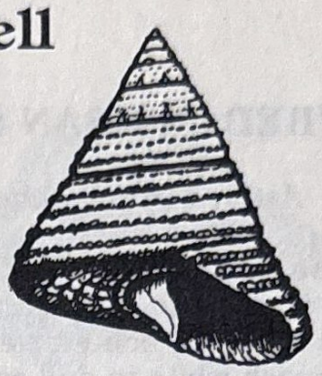
A solid, top-shaped shell with pointed apex. Usually five or six whorls decorated with bands of beads—the latter more noticeable on the shoulders. The outer lip is scalloped.

Gathered from seaweed and in shallow waters where there is grass.

Used for ornamental purposes, in the making of jewelry.

Native from North Carolina to Florida, Texas and the West Indies.

Top and Star Shell



JUJUBE

Calliostoma jujubinum

Average size ½ inch; largest 1¼ inches; non-edible.

Buff background mottled with gray and white streaks—some of them may have reddish-brown. A white iridescent interior.

Conical shape with sharp pointed apex. There are eight to ten whorls—the lines between the whorls are not distinct. Fine beaded ribs decorate the surface. The base is flattened. Has a deep, narrow, umbilicus or pit.

Found among the seaweeds in shallow water.

May be used in making jewelry or buttons.

Native to the west coast of Florida from Cedar Keys to Cape Sable, the Bahamas and West Indies.

SMOOTH ATLANTIC TEGULA

Tegula fasciata

Average size ½ inch; largest ¾ inch; non-edible.

Grayish-pink to yellow to brown, heavily marked with reds, browns or black. There may be a paler band on the body-whorl.

The shell is a round pyramid with four or five whorls, they may be slightly concave just below dividing line. Surface is smooth, sometimes glossy, adults may have small teeth, pink inside lower margin. Opening oval.

Found among the seaweed in shallow water or under rocks.

They are used for necklaces, pearl ornaments and buttons.

Native to the waters of southern Florida and the West Indies.

LONG-SPINED STAR SHELL

Astraea phoebia

Average size 2 inches; largest 2½ inches; non-edible.

White or dull brown on the outside. Interior white and polished.

A thin shell with long spines, which are of imperfect shape. Turban shape with thick coils. Apex is flat and generally smooth. They have a heavy calcareous operculum.

Found on rocks.

Native to Florida Keys and West Indies.

Star and Tooth

TUBED TURBAN SHELL

Astraea tecta americana

Also called STAR SHELL.

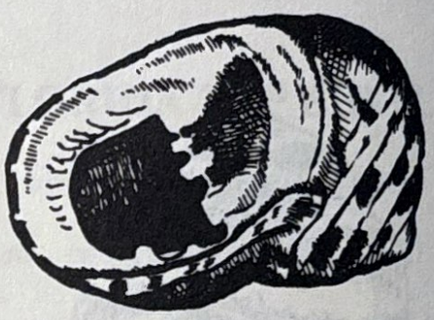
Average size .1 inch in diameter; largest 1½ inches; non-edible.

Grayish-white to dull green.

A solid and stony looking shell with high apex. Usually three whorls (can be seven or eight), with edges of a scallopy appearance. Noticeable are the nobs at the shoulders. Five to 8 delicate spiral cords at the base.

Usually gathered from seaweed and in shallow water; quite often on algae-covered rocks.

Native to the Florida Keys and West Indies.



BLEEDING TOOTH

Nerita peloronta

Average size ¾ inch; largest 1½ inches; non-edible.

Variable coloring, usually has streaks of purple on a white, pale orange or yellow background; outer lip is white as porcelain. Inside the opening a red area with 1 or 2 whitish teeth.

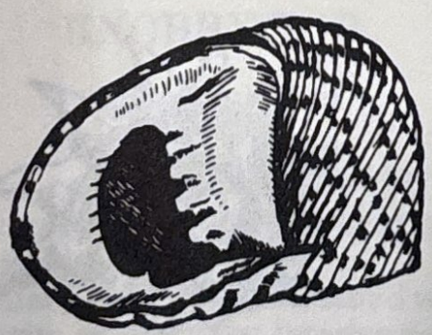
The outer lip is sharp edged, but thickened within. The toothed operculum fits perfectly in the shell opening.

Found on rocky shores facing open ocean.

One of the handsomest of nearly 200 similar shells.

Considered a valuable shell collection addition.

Native to Gulf waters, Key West to Bermuda, and the West Indies.



FOUR-TOOTHED NERITE

Nerita versicolor

Also called VARIEGATED NERITE.

Average size ¾ inch; largest size 1 inch; non-edible.

White in color with zigzag bands of black and red. Inside of shell white, but outer lip spotted with red and black.

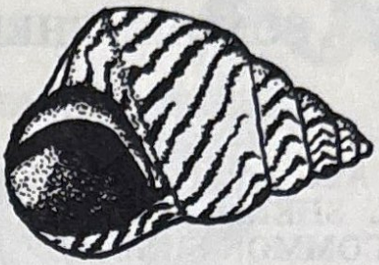
A thick, globe-shaped shell with almost no spire. It has numerous rounded ribs. The inside of the outer lip (also the inner lip) has several teeth.

Found on rocks at low tide.

Native from central Florida to the West Indies and Bermuda.

Periwinkle

ZEBRA PERIWINKLE



Littorina ziczac

Also called ZIG-ZAG PERIWINKLE.

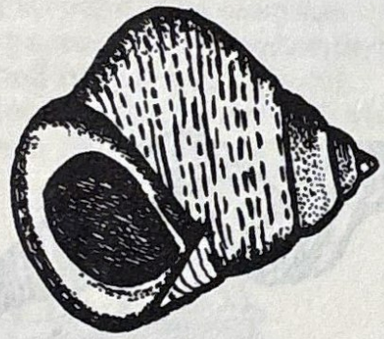
Average size 1 inch for female and ½ inch for male; largest 2 inches; edible.

Dull white with brownish zigzag markings.

A globular shell, turbinate like a snail. Female shells are higher than they are wide, and smooth; the male, as high as it is wide with spiral grooves.

This mollusk lives attached to rocks above the tide line, or on mangrove roots in Florida. Makes good fish bait, or food—if enough are captured to assemble for a stew.

Native to the Florida Keys, Texas, West Indies and Bermuda.



COMMON PERIWINKLE

Littorina irrorata

Also called LINED PERIWINKLE, MARSH PERI WINKLE.

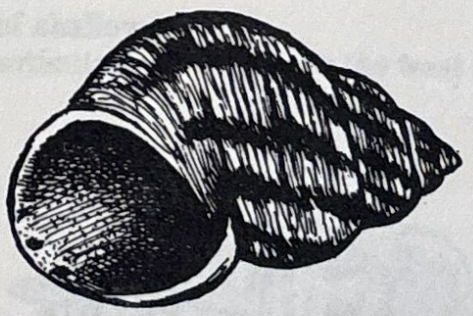
Average size 1 inch; largest 2 inches; non-edible.

Grayish-white with red-brown streaks on spiral ridge, opening a yellow-white.

Thick shell, cone-shaped. The outer lip is sharp, strong, slightly flaring and yellowish white.

Usually found in brackish water inlets, where it is often seen clinging to pilings or roots and grass stems. Has a habit of lying in the sun between tides.

Native to all coasts of the Gulf of Mexico. Sometimes found as far north as Massachusetts.



AUGULATED PERIWINKLE

Littorina angulifera

Average size 1 inch; largest 1¼ inches; edible.

Generally overall cream-colored with dashes of reddish-purple. Although color varies yellowish to orange to russet with darker splashes. Has a somewhat distinct pattern.

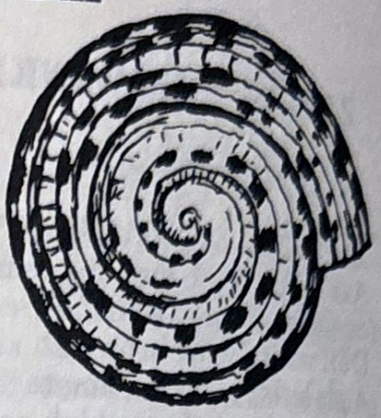
Rather a thin shell with a high spiral end and very thin outer lip.

Found almost entirely around inlets of salt water joining fresh water. Is attached to any kind of wood immersed in the water. When found on pilings it will be at the high tide line so that many hours it is out of the water. Common on trunks and branches of mangroves.

Native to all Florida waters from Jacksonville Beach around to Cedar Keys, especially in the Florida Keys, and West Indies and Bermuda.

Sundial and Worm

SUNDIAL SHELL



Architectonica nobilis

Also called GRANULATED SUNDIAL SHELL; ARCHITECT'S SHELL and COMMON SUNDIAL.

Average size 1 inch; largest 2 inches; non-edible.

Lavender and white with tan spots on ridge next to suture.

Thick, flattened shell, circular in shape. The base is flat and decorated with many coiled, granulated ridges. The spiral whorls with furrows and ridges, segmented by dots and dashes form a pattern resembling a sundial.

Found in sand below low water line.

Native from North Carolina to Florida, Texas and the West Indies.

FARGO'S WORM-SHELL

Vermicularia fargoi

Average size 1 inch; largest 3 inches; non-edible.

Drab gray to yellowish-brown in color.

A rather thick, sturdy shell, the early whorls having two or three spiral cords, the rest of the whorls have thicker cords, brown-spotted. Thin threads run between the larger cords.

Found on mud flats.

Native from the west coast of Florida to Texas.

FLORIDA WORM-SHELL

Vermicularia knorri

Also called OLD MAID'S CURL.

Average size 4 inches; largest 8 inches; non-edible.

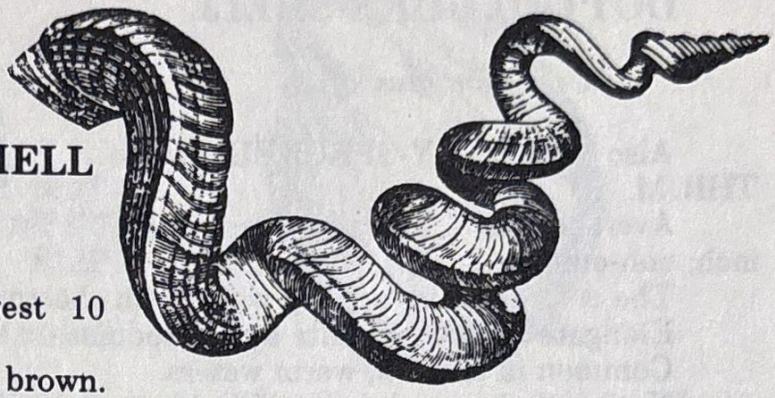
Tip white and evenly coiled, with later spirals of yellowish or orange-brown.

The later coils are random with one or two spiral cords on each whorl. Thin threads are likely to be present, especially near the base.

Found in sponge masses. Often washed ashore.

Native from North Carolina to Florida and the Gulf of Mexico.

Worm, Button and Horn



WEST INDIAN WORM-SHELL

Vermicularia spirata

Average size 6 inches; largest 10 inches; non-edible.

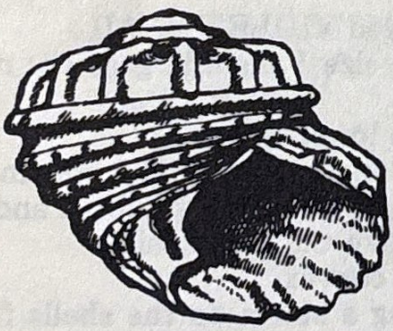
Amber, yellowish or an orange brown.

A rather thin shell, the coils even and close for about ¼ inch, then drawn out and irregular. Early whorls smooth except for a spiral cord running across the middle of the whorl. Later whorls may have two cords, but not so well defined. Tiny threads sometimes visible, especially near base.

Found in shallow water, often in a tangled mass.

This shell is tightly coiled when young but the adult shell is loosely coiled. It is tubelike with coarse encircling growth lines, heavy longitudinal ribs and fine lines. The opening is round. The head has eyes, a toothed tongue and tentacles. They may be found in groups completely entangled. Usually in shallow water, attached to stones or embedded in sponges or coral.

Most common on the Florida west coast from Tampa Bay south, and on the east coast from St. Augustine south to the West Indies.



FLORIDA BUTTON

Modulus modulus

Average size ½ inch; largest ⅝ inch; non-edible.

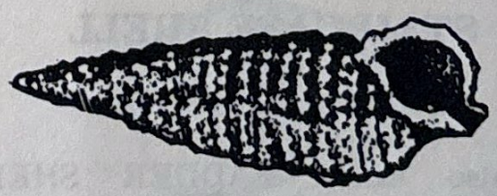
Light buff with small dark spots and patches.

A very small variety of shell, shaped like a hammered down snail. Has serrated edges on opening.

Usually picked up in sand-mud bottoms of shallow bays.

Native from North Carolina to Texas but particularly prevalent on the west coast of Florida.

FLORIDA HORN SHELL



Cerithium atratum

Average size 1 inch; largest 1½ inches; non-edible.

Whitish color with mottlings of tannish-brown.

Spiral rows of white beads with fine spiral lines in between. The shell is elongate with a sharp apex.

The aperture is small and oblique, and there is a short anterior canal.

Found in moderately shallow water.

Native from N. Carolina to South Florida.

Horn, Purple Snail and Staircase

DOTTED HORN SHELL

Cerithium muscarum

Also called FLY-SPECKED CERITHIUM.

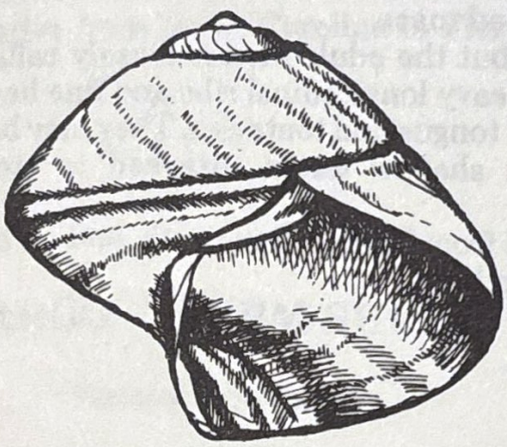
Average size ¾ inches; largest size 1 inch; non-edible.

The color is white or gray-white with chestnut dots, in spiral rows.

Elongate shell with acute apex. Nodules on whorls.

Common in shallow, warm waters.

Native to the south half of Florida and the West Indies.



COMMON PURPLE SEA SNAIL

Janthina janthina

Also called VIOLET SNAIL.

Average size 1 inch; largest 1½; non-edible.

Purplish-white on upper side and darker purple on lower side.

The shell is thin and fragile. It has three or four sloping whorls. The opening is moderately large and oval shaped. The outer lip is sharp. There is no umbilicus and no operculum. The spire is low. This shell is shaped much like the land snails.

Frail shell with outer lip wavy. Whorls sloping and convex.

Animal lives some miles from land and only during a storm do the shells float ashore. They are carnivorous and secrete a purple fluid when disturbed.

Native to both coasts of Florida down to Vera Cruz, Mexico.

STAIRCASE SHELL

Epitonium humphreysii

Also called LADDER SHELL; HUMPHREY'S WENTLETRAP.

Average size, a little more than ½ inch; largest ¾ inch; non-edible.

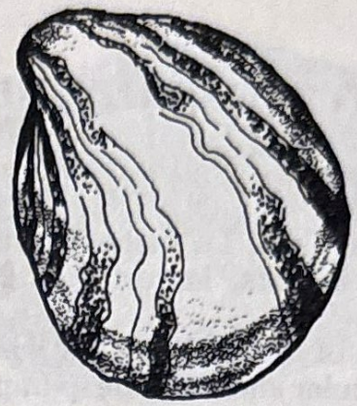
White in color. Usually has 9 or 10 convex whorls. Rather slender and thick. The surface is glossy. The lines dividing the whorls are deep, and the spire extended. The opening is almost circular, outer and lower part of lip somewhat flared.

These little shells inhabit the deep water generally, but may be found near shore.

Native from Cape Cod, Massachusetts to Florida and Texas.

Indian Boats or Slipper

BABY'S CRADLE



Crepidula fornicata

Also called BOAT SHELL, SLIPPER SHELL, SLIPPER LIMPET, CANOE SHELL, COMMON SLIPPER SHELL.

Average size 2 inches; largest 3 inches; edible.

White background with curved chestnut-colored stripes variously disposed. Inside is brown and shiny like porcelain.

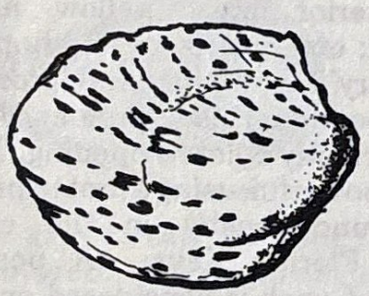
A thin and translucent shell, with an oval or boat shape. There is a shelf or "seat" in the hinge end, which resembles the stern sheets on a boat.

They are usually found on muddy bottoms piled in groups of empty shells of larger size. Quite plentiful on the Florida beaches. Often they attach themselves to pen shells.

They can change sex and it is interesting to note that in a large group, stacked one atop the other, the top layers will be male, the bottom layers female, and a section in the middle will be neuter; these are in the process of changing from male to female.

Gathered for curiosities, they make interesting additions to a shell collection.

Native to all southern coasts from New Jersey to Texas.



SPOTTED SLIPPER SHELL

Crepidula maculosa

Average size ½ inch; largest 1 inch; non-edible.

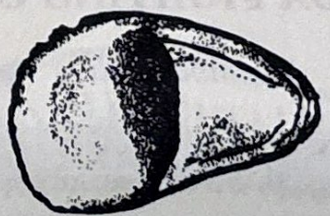
White or Cream color spotted with mauve or brown.

The edge of the lip is straight or only very slightly convex. Strong but thin shell. Oval muscle scar.

Found attached to rocks, stones or other shells.

Native to west coast of Florida down to Vera Cruz, Mexico.

WHITE SLIPPER LIMPET



Crepidula plana

Also called FLAT SHELL, EASTERN WHITE SLIPPER SHELL.

Average size ½ inch; largest 1½ inches; non-edible.

White.

This is one of the shells with a "seat" in the pointed end, however this one is quite flat, as distinguished from the other Slipper Shells, which have round bottoms or "extended umbilicus."

Found in shallow water attached to large dead shells.

Native to all shores touched by the Gulf of Mexico, and from Canada to Florida. Occasionally found in the West Indies.

Carrier and Conch

ATLANTIC CARRIER SHELL

Xenophora conchyliophora

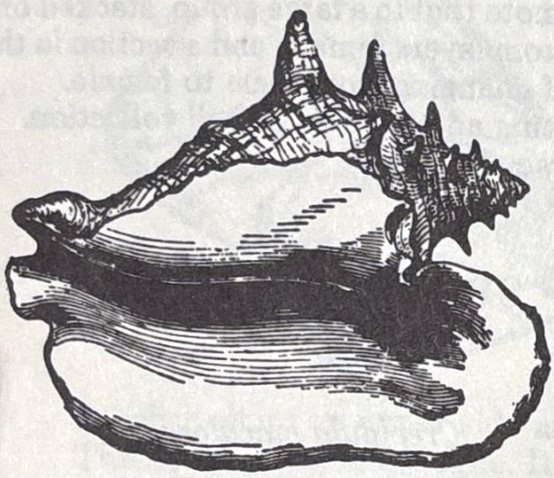
Average size 1½ inches not including other attachments; largest size 2 inches; non-edible.

Color of the shell is dirty white and the animal inside is bright red.

A circular shell with deep impressions where the shell has attached other shells or stones to itself. From above it looks like a bunch of marine trash.

Found in deep warm waters.

Native from North Carolina to Key West and the West Indies.



GIANT CONCH

Strombus gigas

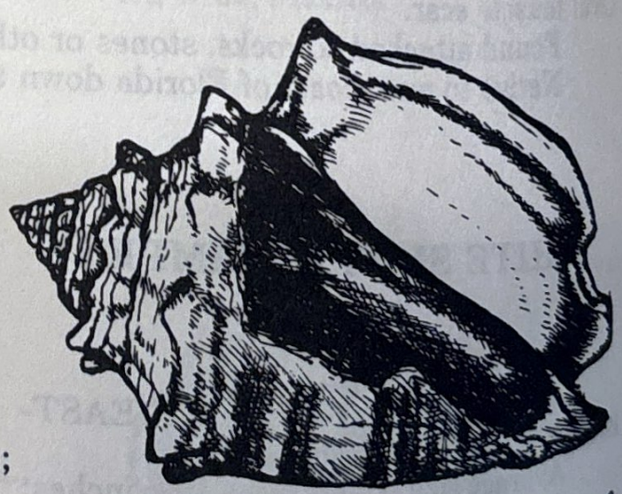
Also called QUEEN CONCH; and PINK CONCH.

Average size 6 inches; largest 12 inches; edible.

Interior pink, yellow and highly polished; exterior rough and horny.

Very large when full grown, weighs over 5 pounds. Has a large and pinkish lip with a brightly colored opening. The animal is quite powerful, using a foot to propel itself.

Found mostly in the coral reefs on the Florida Keys. A popular food among island people of the southern latitudes, this Conch is considered an entertainment for the children, who listen to the sea roaring within, and valuable in the manufacturing of porcelain. They are piled by the hundreds in front of shell stands on Florida highways.



FLORIDA FIGHTING CONCH

Strombus alatus

Also called WINGED STROMB.

Average size 3 inches; largest 4 inches; non-edible.

Color is dark reddish-brown or orange-brown and sometimes has zigzag bars of colors on the body.

Shell has a heavy expanded lip that is highly polished. It is usually spineless. The animal is very active and progresses by a series of jumps, turning the shell from side to side. When placed on its back, it can somersault and right itself.

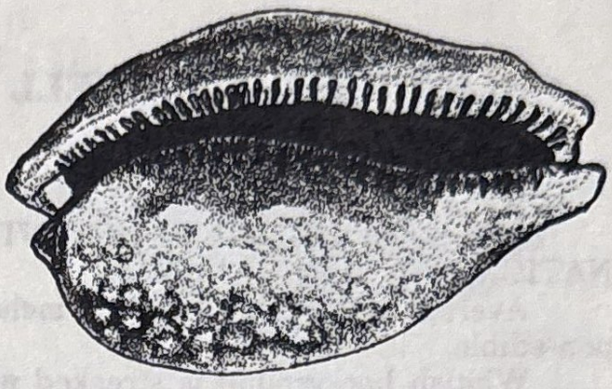
A very common shallow water species.

Native from the Carolinas to Florida.

Cowry and Eye

MEASLED COWRY

Cypraea zebra



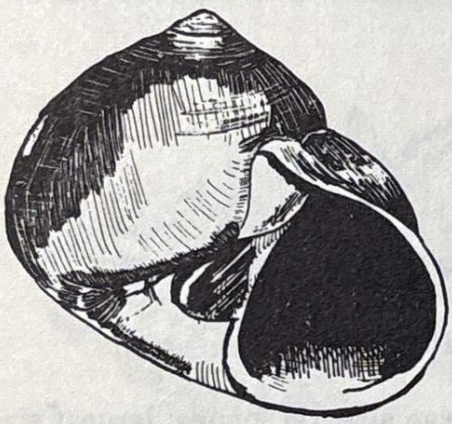
Average size 2 inches; largest 5 inches; non-edible.

Light brown or yellowish-brown background with large white spots over back—toward base the spots have a brown center. Teeth dark brown, interior lavender.

A moderately thick shell, highly polished and quite smooth. The opening is toothed on both sides, extends the full length of the shell.

Much sought after by collectors, for their individual beauty.

Native to the southern beaches of Florida, including the Florida Keys; also the West Indies.



SHARK EYE

Polinices duplicata

Also called DUPLICID MOON SHELL, COMMON BULL'S EYES

Average size 1 inch; largest 3 inches; non-edible.

Slate-gray to tan blending into white at base; creamy-white on base; interior chestnut colored. Umbilicus deep but almost covered by a button-like brown callus.

A smooth and rounded shell, flatter than the usual Moon Shell, to which family it belongs.

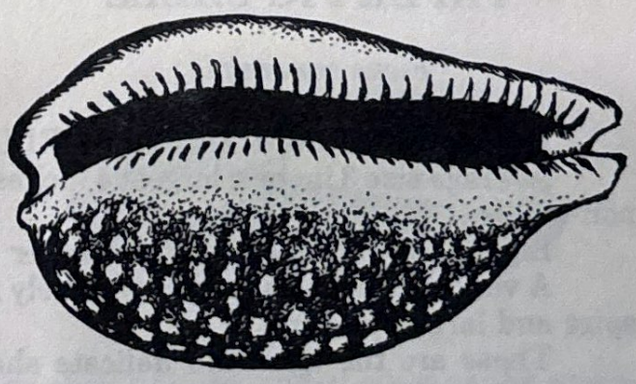
Found on sand bars in shallow water.

Considered valuable to shell collections.

Native from Massachusetts to Florida and the Gulf states.

DEER COWRY

Cypraea cervus



Average size 3 inches; largest 7 inches; non-edible.

Small white spots on a dark brown background; base brown.

The shell is more inflated and larger than the Measled Cowry. Animal has papillae on top of mantle. Seldom has ocellated spots on base.

Found under rocks near shore or on coral reefs.

Native from North Carolina to Florida and Cuba.

Moon, Bonnet and Fig

COLORFUL MOON SHELL

Natica canrena

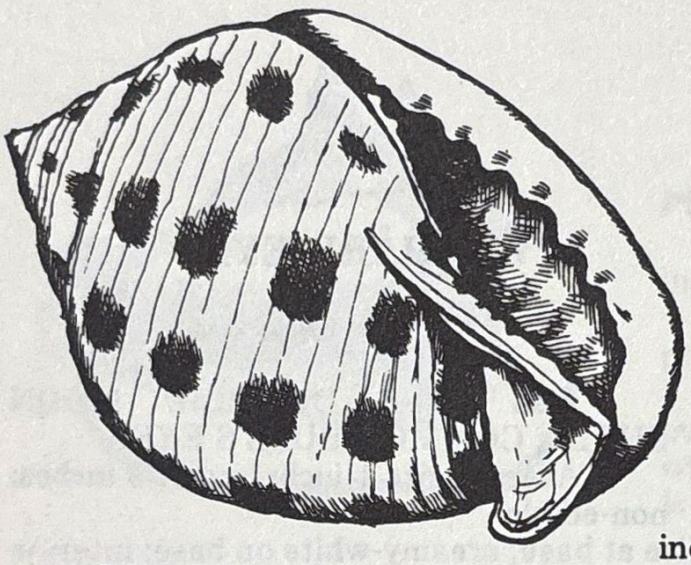
Also called COLORFUL ATLANTIC NATICA.

Average size 1 inch; largest 2 inches; non-edible.

Whitish background is streaked with spiral chestnut and purple bands, with a zigzag or wavy appearance. Interior is light chestnut, fading to white at the lip.

A heavy and smooth shell, looking much like a snail. Has a large opening for overall size of the shell. Found on intertidal sand flats.

Native from North Carolina to Florida and the West Indies.



SCOTCH BONNET

Phalium granulatum

Average size 1½ inches; largest size 3 inches; non-edible.

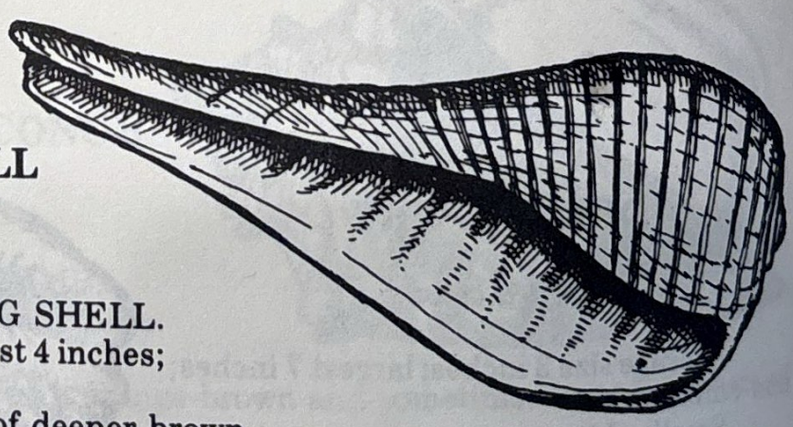
Creamy-white background with tannish-brown rectangles in circular rows.

Low spire with about 20 spiral grooves on the large body whorl. Outer lip thickened. Sometimes the shell appears beaded by the weak axial ribs.

Parietal wall extends out over the large body whorl in a small shield. The siphonal canal is short and recurved. The outer lip is strongly toothed.

Found in shallow water and is commonly washed ashore.

Native from North Carolina to Gulf of Mexico and the West Indies.



PAPER FIG SHELL

Ficus communis

Also called COMMON FIG SHELL.

Average size 3 inches; largest 4 inches; non-edible.

Light brown with a lining of deeper brown

A very thin pear-shaped shell, finely ribbed. Very light in weight. Fragile, with low spire and large aperture.

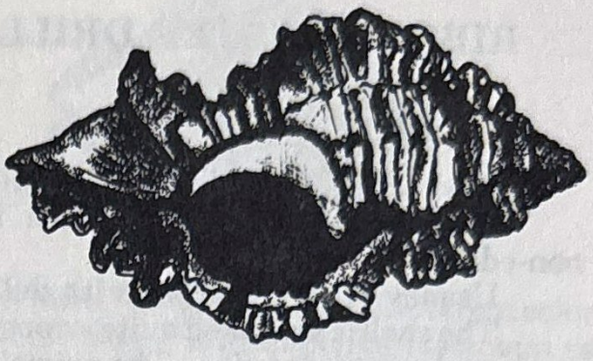
These are the light and delicate shells often found high on the beaches. Being lighter than all the others, they usually take the top of the heap in the shell windrows of shell beaches, otherwise found in deep water.

Native from North Carolina south to all Florida coasts and the Bahamas.

Murex Shells

APPLE MUREX

Murex pomum



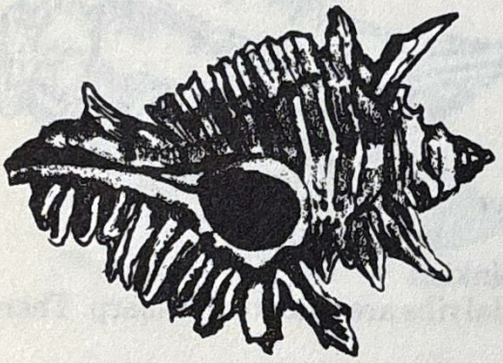
Average size 2 to 3 inches; largest 4½ inches; non-edible.

Yellowish-white with broad stripes and brown mottling, the opening tinted with pink or yellow or orange with a brown spot inside.

A heavy, rough shell with a well-developed spire and a large body-whorl. There are three prominent vertical ridges on each whorl and the surface is modular; also has fine, cord-like ribs. The opening is large and circular; outer lip thickened, and scalloped with 3 or 4 brown spots, canal is short and curved backward from the opening.

They prefer rocky or gravelly bottom and moderately shallow water; feeding on dead crabs or fish. Empty shells may be found on the beaches.

Native from North Carolina to Florida and West Indies.



LACE MUREX

Murex florifer dilectus

Average size 1 to 2 inches; largest 3 inches; non-edible.

A deep brownish-black, light brown, or whitish, with a pink apex and opening. Young shells and some well-worn adults, may be pink all over.

A sturdy, rather elaborate shell with about seven whorls. There are rounded, revolving cords crossed by three prominent ribs. The shell is decorated with spines which are most striking near the outer lip. The canal, flattened below, is curved backward. The opening small and round.

Prefers sandy bottoms in fairly deep water, also found among mangroves or muddy areas or rocks.

Native to southern Florida and the Keys, and the West Indies.

BABY'S EAR

Sinum perspectivum

Also called EAR SHELL.

Average size 1 inch; largest 2 inches; non-edible.

Pure white with a yellowish skin.

Thick, smooth shell a bit wider than it is high. Somewhat resembling an ear. The animal envelops the shell.

An oyster eater, found usually on broken shell bottom, and shallow sandy areas.

Native to Virginia and down to Florida coasts and the West Indies. Most common on the west coast of Florida.

Oyster Drills

RIBBED OYSTER DRILL

Eupleura caudata

Also called THICK-LIPPED DRILL.

Average size ½ inch; largest 1 inch; non-edible.

Usually brown, overlaid with dull white. The ribs are pure white.

The shell is small and quite strong, with about five whorls sharply angled with spiral cords and prominent ribs. The animal is white, has a yellow foot.

Found on oyster beds, where they attack and kill oysters by drilling holes in the shells.

Native to the Atlantic Coast south of Cape Cod to the Florida Keys.

SHARP-RIBBED DRILL

Eupleura sulcidentata

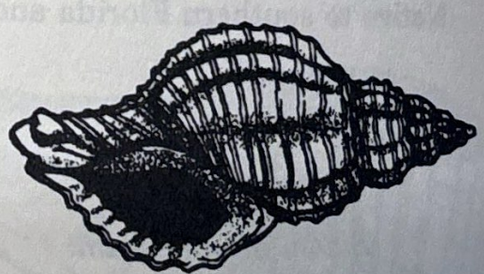
Average size ½ inch; largest size 1 inch; non-edible.

Color is gray, brown, tan and sometimes pinkish.

High spire; long canal; thickened lip. The axial ribs are sometimes sharp. There are 2 or 3 axial ribs between the two large varices.

Found among the rocks at low tide.

Native of west coast of Florida.



ATLANTIC OYSTER DRILL

Urosalpinx cinerea

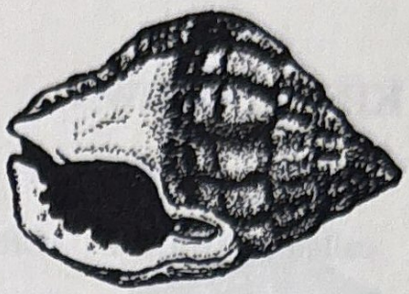
Average size ½ inch; largest 1 inch; non-edible.

Grayish, dull white, sometimes yellow or light brown spirals. Opening is brown.

Shell is small, thin and rough with a high spire. There are fine revolving longitudinal ribs. Outer lip slightly thick on inside. The male shells are smaller than the female shells. The female spawns once a year and lays about 25 to 28 leathery, vase-shaped capsules, each containing about 8 to 12 eggs. These shells can be found from intertidal areas down to 25 feet, but they move inshore to spawn. Found around the oyster beds. A vicious enemy to oysters. Has the ability to bore a hole and suck out the oyster.

Native from Nova Scotia to Southern Florida. Introduced to U.S. west coast and northern Europe.

Dog Whelk, Dove and Cantharus



MOTTLED DOG WHELK

Nassarius vibex

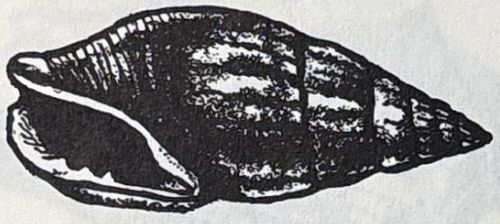
Average size ½ inch; largest ¾ inch; edible.

Gray-brown to white in color, marked with reddish-brown. May show different color patterns in different localities. Dead shells tend to lose color. Inside opening is sometimes yellowish.

A short, heavy shell with about five whorls, the dividing lines well defined. There are strong longitudinal folds and less definite circular lines. The opening is notched top and bottom, the outer lip thick, the inner with a heavy patch of enamel.

Abundant in sandy bays and quiet water.

Native from North Carolina to Florida, the Gulf States and West Indies. More plentiful on Florida shores than in north.



AVARA DOVE SHELL

Anachis avara

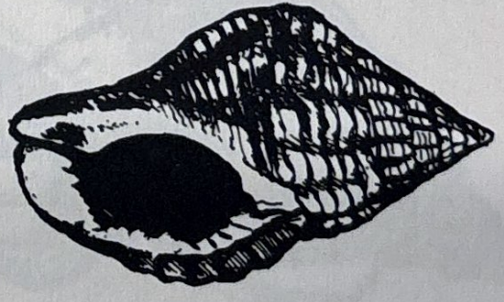
Average size, just under ½ inch; largest just under 1 inch; non-edible.

Brownish-yellow in color.

A thick strong shell with a tall pointed spire. There are six to seven whorls with spiral lines and vertical folds. The body-whorl has about twelve of these folds, not going below the middle of the shell; beneath the folds there are only the spiral lines. The outer lip is slightly toothed within.

It lives below the low-tide level on the beaches.

Native to the east and west coast of Florida, it may be found as far north as Cape Cod and south to the West Indies.



TINTED CANTHARUS

Cantharus tinctus

Also called MOTTLED SPINDLE.

Average size ¾ inches; largest size 1¼ inches; non-edible.

Variegated pattern of yellow, orange, lavender and grayish-brown.

Shell ovate, thick, with spire evenly conic. Aperture oval with canal at both top and bottom. Axial ribs low and weak. Spiral cords numerous and weak. Inside of outer lip with small teeth which are strongest near the top.

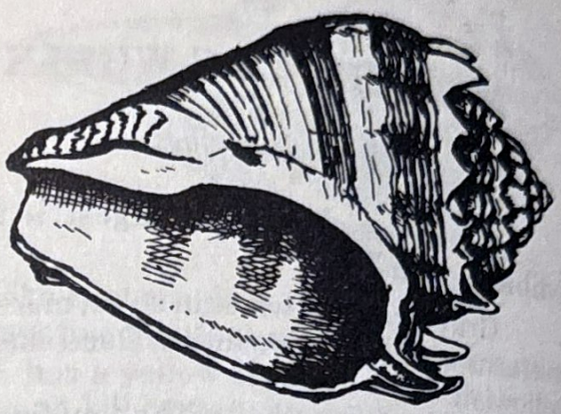
Found in shallow water. The young are easily confused with Thais family.

Native from North Carolina to both sides of Florida, Texas and the West Indies.

King's Crown and Whelk

KING'S CROWN

Melongena corona



Also called COMMON CROWN CONCH.

Average size 2 inches; largest 4 inches; edible.

White background and wavy bands of brown; the interior is milky-white.

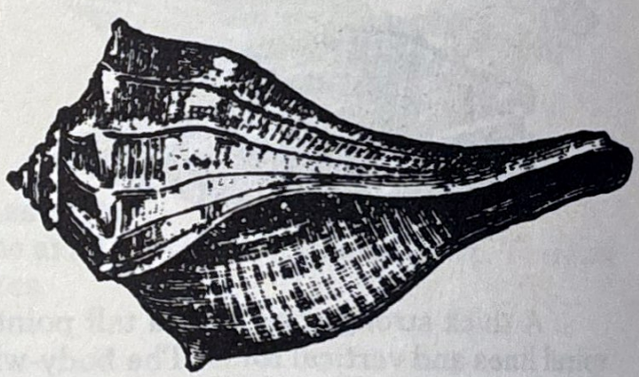
The name "King's Crown" comes from row of spines on the apex, which gives the appearance of a crown.

An aggressive mollusk. They can drill holes in either bivalves or univalves. They are most often found in mucky mud, frequently on oyster bars in shallow water where they feed on either dead or live animals.

Native to Florida, the Gulf States and Mexico.

LIGHTNING WHELK

Busycon contrarium



Also called LEFT - HANDED WHELK.

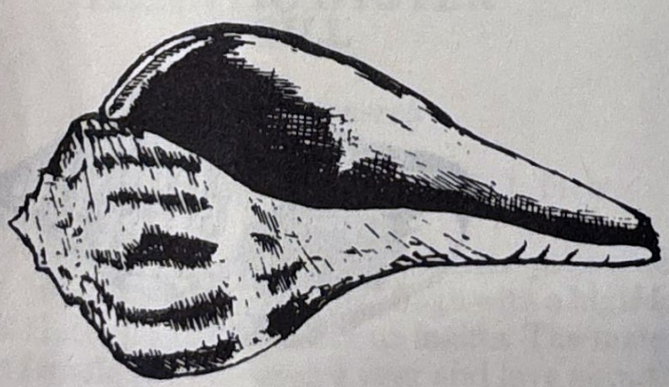
Average size 4 inches; largest 16 inches; edible.

A gray-white in color with uneven streaks of purple-brown. Right hand specimens are rarely found.

Small knobs, triangular in shape, rise from the shoulder. It is a light shell with a short spine, long canal and aperture.

Found in sub-tropical waters, on mud flats and in grass.

Native from South Carolina to Texas—common on the west coast of Florida and in the Gulf States.



PEAR WHELK

Busycon spiratum

Average size 3 inches; largest 4 inches; edible.

Creamy-white with yellowish-brown lines on body-whorl.

Shell is somewhat pear-shaped. The spire is short. It has smooth rounded shoulders. Aperture large with long canal, lip thin.

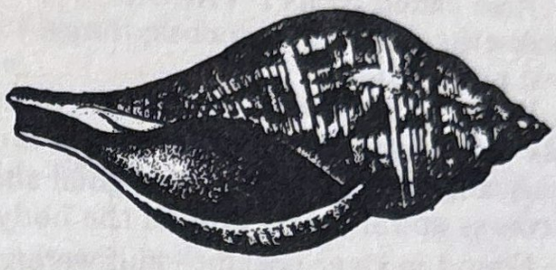
Found in shallow, sandy, clear water.

Native from North Carolina to the Gulf States.

Tulip and Horse Conch

TRUE TULIP

Fasciolaria tulipa



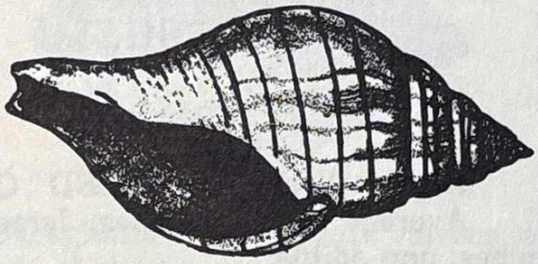
Average size 2 inches; largest 8 inches; non-edible.

Color pinkish gray to reddish brown and sometimes almost black with white blotches or streaks.

Shell spindle-shaped with a moderately high spire. Shell has revolving lines that are crinkled on the body whorl. Aperture long and oval, operculum horny and siphonal canal open and white.

Found in shallow water in grassy flats.

Native from North Carolina to Florida, Texas and West Indies.



BANDED TULIP

Fasciolaria lilium hunteria

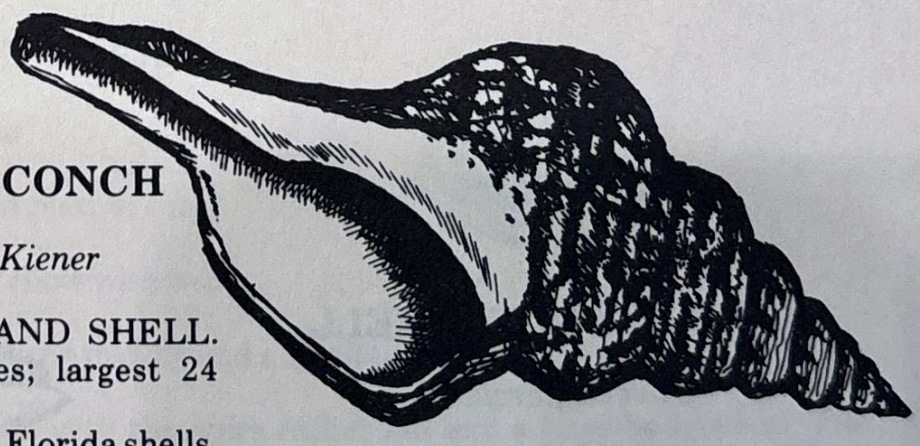
Also called PALE TULIP.

Average size 2 inches; largest 4 inches; non-edible.

Pearly-gray with delicate lines in dark brown or black banding the shell in parallel lines. Smooth type of shell. Moderately high spire, five or six whorls, aperture egg-shaped with short wide canal.

Usually found in mud flats—and just below the surface of the bottom.

Native to Texas, Louisiana and Alabama.



FLORIDA HORSE CONCH

Pleuroploca gigantea Kiener

Also called GIANT BAND SHELL.

Average size 12 inches; largest 24 inches; edible.

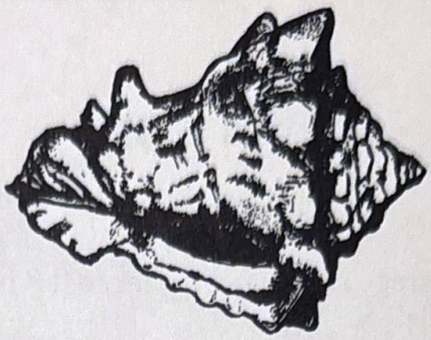
This is the largest of the Florida shells.

Exterior white or brownish-salmon. The inside of the lip is tannish-orange. The shell is rather solid with the spire elevated and sharply pointed. One of the distinguishing features is that this one has giant nodules, in the other Horse Conch, they are much less prominent or lacking.

Found in shallow water on grassy flats.

Native from North Carolina to Florida.

Vase, Panama and Rice



CARIBBEAN VASE SHELL

Vasum muricatum

Also called SPINY VASUM.

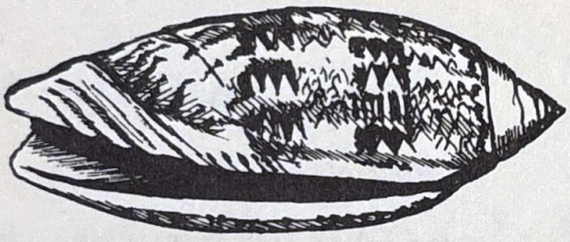
Average size 2½ inches; largest 4 inches; non-edible.

White or white with brown irregular longitudinal lines on the body whorl. Interior white, with brown markings.

A solid shell, thick and triangular shaped, with three rows of blunt spines usually—and coarse spiral ridges around the body whorl.

Found in clear ocean or gulf waters.

Native to the Florida Keys and the West Indies.



PANAMA SHELL

Oliva sayana

Also called LETTERED OLIVE.

Average size 2 inches; largest 2½ inches; non-edible.

Light brown coloring with an overlay of darker brown, which resembles lettering. It has a glossy finish.

This shell is most always found alive, recognized by a burrowing ridge in the sand at low tide, somewhat resembling a mole in a field of farm land. They usually live in colonies.

The shells have a beautiful polished appearance when cleaned properly. A good method is to bury them in sand for several weeks and the ants will eat the animal. A good rinsing in sea water completes the operation.

Native from North Carolina to the Gulf Coast, particularly the Florida Gulf Coast. The largest colonies are located about Sarasota Bay and near the Gulf passes.

COMMON RICE SHELL

Olivella floralia

Average size ⅜ inches; largest ½ inch; non-edible.

All white with the apex sometime white, purplish or orange. Small folds on the columella. High spire, four whorls, aperture long and narrow with a thin, sharp lip.

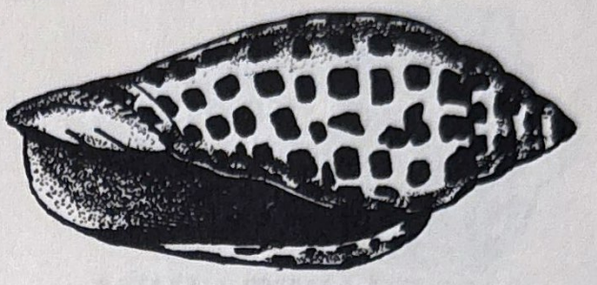
The Olivella family has an operculum. The Oliva family does not.

Common in shallow water. Native from North Carolina to Florida and West Indies.

Junonia, Nutmet and Marginella

JUNONIA

Scaphella junonia



Average size 3 inches; largest 4 inches; non-edible.

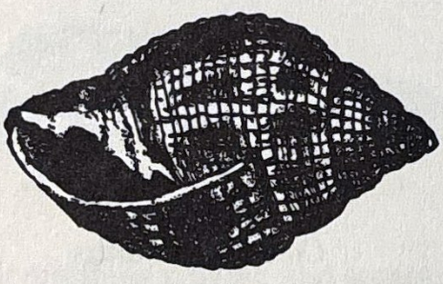
Creamy white marked with spiral rows of brown or orange spots. Has a porcelain white lining. The spots have a squarish shape.

Shaped like slim delicate spindle with a thin lip.

This is a rare deep-sea mollusk, found on the beaches of shelling islands after a storm, particularly Sanibel Island on the Florida West Coast. Best specimens are found completely covered with sand.

This rare shell is considered a precious find to collectors.

Native from North Carolina to Florida and Texas.



NUTMEG SHELL

Cancellaria reticulata

Also called CROSS-BARRED SHELL.

Average size 1 inch long; largest 1¾ inches; edible.

Background of white with various shades of brown, arranged in spiral bands and longitudinal stripes.

Shell resembles a nutmeg in shape, with the same roughness of texture. It is heavy and spherical, with both ends pointed.

Mostly seen in grassy bottoms or kelp beds. It is a vegetable feeder.

Native to the Florida West Coast, mostly around Cape Sable and as far north as North Carolina.

ATLANTIC MARGINELLA

Prunum apicina

Average size ½ inch; largest; ¾ inch; non-edible.

Usually ivory-white to yellow with two or three pale brown bands.

Two red-brown dots near the middle and a smaller one at the very bottom and at the very top.

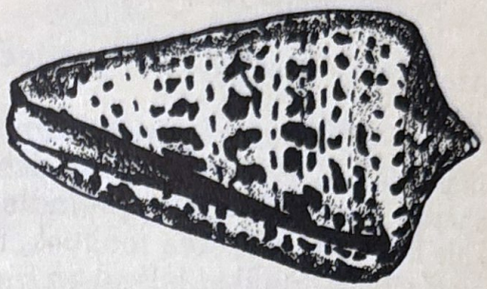
Solid and highly polished with the spire rather flat and a large body-whorl. The opening is long and narrow, nearly the length of the shell. A rather thick outer lip and four distinct folds on the inner.

Found in sandy places in bays and shallow waters.

Native to Florida beaches, but may be found as far north as the Carolinas, as far south as the West Indies.

Cone Shells

ALPHABET SHELL



Conus spurius atlanticus

Average size 2 inches; largest 3 inches; non-edible.

A smooth white shell with rows of characters in brown and orange arranged in more or less regular spiral bands. Interior white. Outer skin of thin brown.

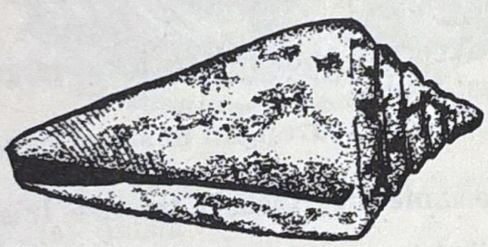
Cone-shaped with flat top. The opening is long and narrow.

About ten whorls with the first five whorls being flat and the last five whorls revolving to a high apex. Outer lip moderately thin and slightly curved in an elongated semi-circle.

May be found on sand bars and grassy flats of inside waters.

Native from North Carolina to Florida.

FLORIDA CONE



Conus floridanus

Average size 1½ inches; largest 2 inches; non-edible.

Color is variable from white to buff with spots of yellow, tan and sometimes orange-brown.

Moderately high spire with 7 or 8 whorls. There is usually a white band around the middle of the large whorl.

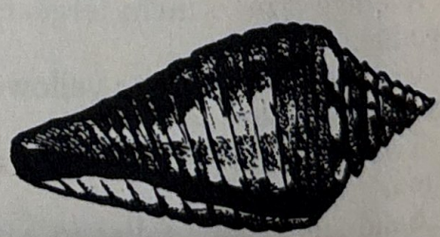
This is a moderately heavy shell. The aperture or opening is long and narrow. The outer lip is thin and sharp. Many of the cone shells show injuries consisting of a long uneven line that has healed and then gone on to grow a new outer lip./

Conus floridanus floridensis is a dark color form with spiral rows of reddish-brown dots.

Found on sand flats, in rock crevices or under stones.

Native to North Carolina and Florida.

JASPER CONE



Conus jaspideus

Average size ½ inches; largest ¾ inches; non-edible.

Dull grayish color with reddish-brown mottlings.

High spire with strong spiral lines cut into the sides, usually right up to the shoulder.

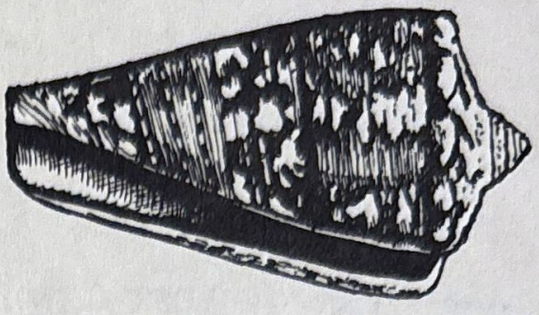
The aperture is long and narrow with a thin outer lip. There are eight whorls leading to the apex with the sutures being distinct between each whorl.

Common to shallow sandy water .

Native to south half of Florida and West Indies.

Cone, Auger and Bubble

CROWN CONE



Conus regius

Also called CLOUDY CONE.

Average size 2 inches; largest 3 inches; non-edible.

Generally a mottled chocolate-brown and white porcelain-like shell, although the color may vary even in same locality. A rare yellow form may be found occasionally. Interior white. The surface sculptured with spiral threads or beads, especially pronounced on the low spire. It has from five to eight whorls and a long, narrow opening finely toothed along the inner margin of the lip.

Found among reefs and rocky bottoms.

Native from southern Florida to Cuba and the Antilles. Uncommon in Florida.

DISLOCATED AUGER

Terebra dislocata

Also called DISLOCATED TEREBRA; COMMON ATLANTIC AUGER.

Average size 1 inch; largest 2 inches; non-edible.

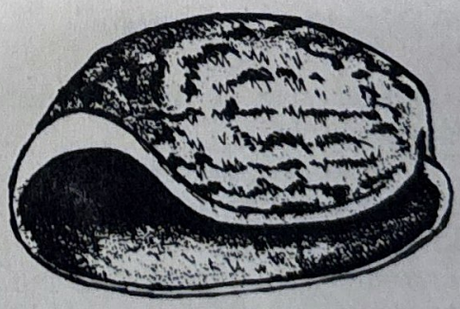
Sometimes grayish and sometimes yellowish-brown in color. Usually mottled one color on the other.

A long and tapering shell with many whorls. There is a beaded band on the whorl of this species.

The exterior surface of the shell is decorated with fine spiral grooves and wavy longitudinal folds. The aperture is small and the operculum is yellow and horny. Just under the suture is the knobby spiral band, which gives the shell the appearance of being composed of alternating large and small whorls.

Native from Virginia to Florida, Texas and the West Indies.

COMMON WEST INDIAN BUBBLE



Bulla occidentalis

Average size ½ inch; largest 1 inch; non-edible.

Color varies from whitish with mottlings or bands of brown, to a pale red with purple-brown.

An oval shell smooth and inflated, the spire depressed. Opening is longer than the shell and rounded at both ends.

Many fine lines mark the surface.

Found at low tide on grassy mud flats. Most easily obtained at night.

Native from North Carolina to Florida and West Indies.

Chiton, Tooth and Nautilus

COAT-OF-MAIL

Chiton tuberculatus

Also called WEST INDIAN CHITON.

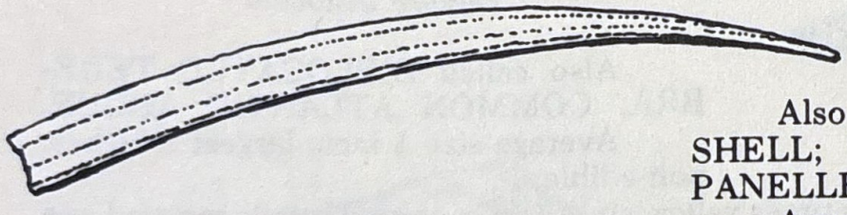
Average size 2 inches; largest 3 inches; non-edible.

Grayish to greenish-brown.

Oblong. Has 8 overlapping plates. Chitons in Florida are small and inconspicuous. They curl up when taken from the rocks or shells.

Native to Florida, Texas, and the West Indies.

PANELLED TOOTH SHELL



Dentalium laqueatum

Also called PLOW-FOOTED SHELL; TOOTH SHELL; WAMPUM; PANELLED TUSK.

Average size 1 inch; largest 2½ inches; non-edible. Color is solid white.

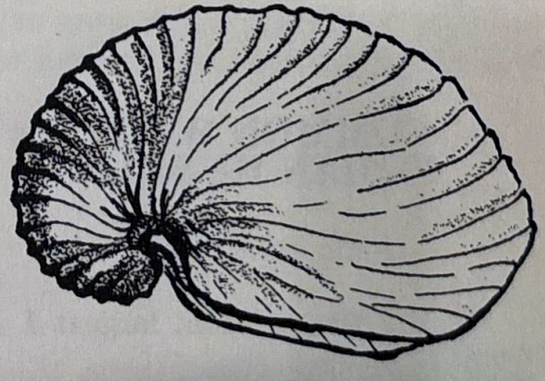
A cylindrical shell, open at both ends, resembling the tusk of an animal.

One of the family of tooth shells with a long history of collection. The ancients, Indians and Alaskan tribes used this shell as money. In Alaska the shell is still in use as money.

Native from North Carolina to South Florida and the West Indies.

PAPER NAUTILUS

Argonauta argo



Average size 4 inches; largest 8 inches; non-edible.

Thin and flat, spiral at one end and semi-circular in shape—it is decorated with small knobs and veins.

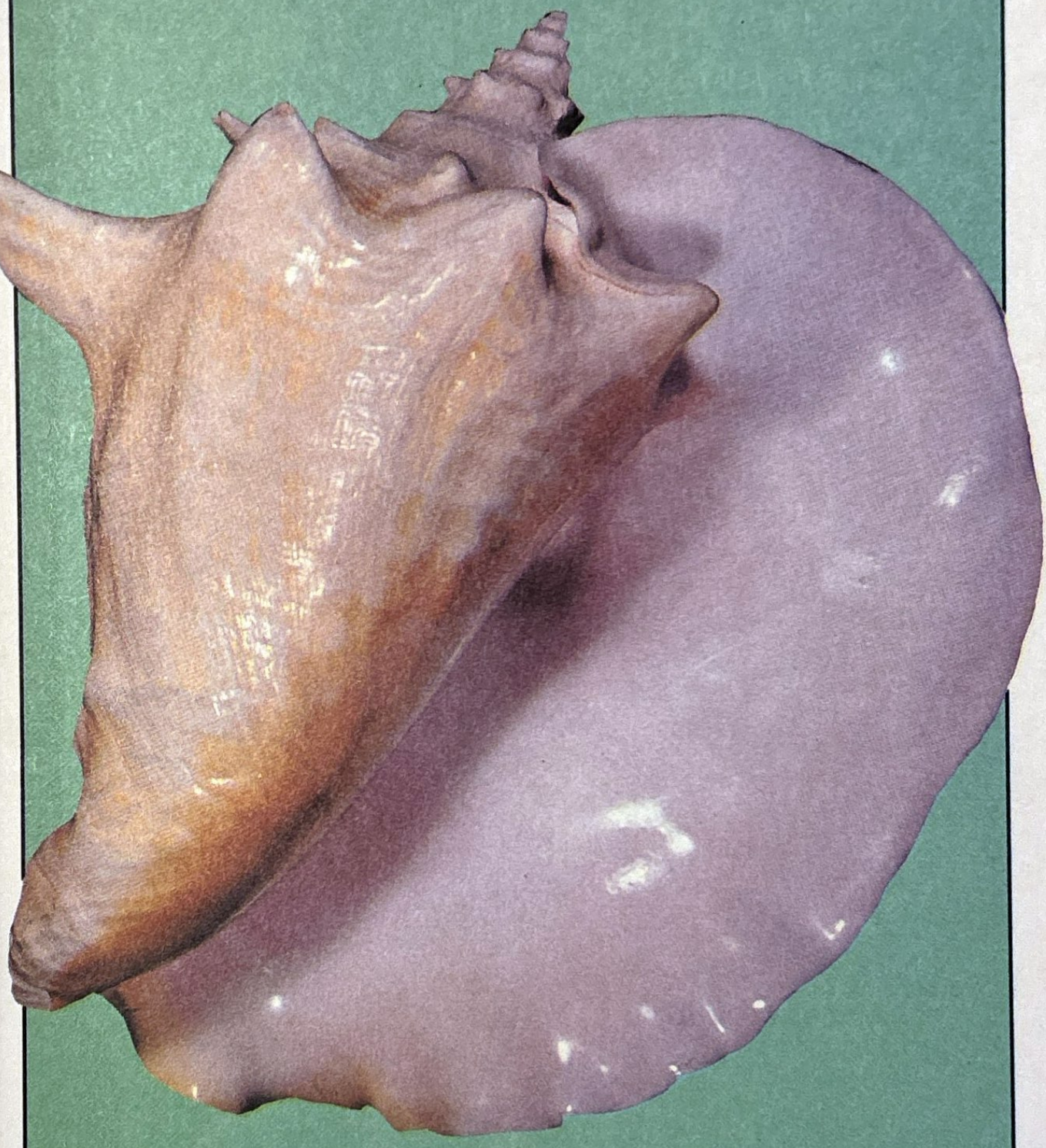
The shell is not attached to the animal and is used by the female as a cradle in which to lay its eggs. Since she is provided with eight arms, as the eggs grow larger (they look like tiny bunches of grapes), the nautilus, pushed from the shell, grasps it in her arms and floats to the surface. There the eggs hatch and the young swim away.

Found in tropical waters, on the floor of the ocean. They come to the surface in summer at breeding time.

Prized among collectors. Sailors believe them a sign of fair wind and good weather.

Native to the Florida coast and in most tropical waters.

PLATE 1



Queen Conch
Strombus gigas

PLATE 2

Banded Tulip
Fasciolaria lilum hunteria

Leafy Rock Oyster
Chama macerophylla

Tulip Horse Mussel
Modiolus americana

Ponderous Ark
Noetica ponderosa

Noah's Ark
Arca imbricata

PLATE 4

Baby's Ear
Sinum perspectivam

Cross-Barred Venus
Chione cancellata

Florida Lucine
Pseudomiltha floridana

Buttercup
Anodontia alba

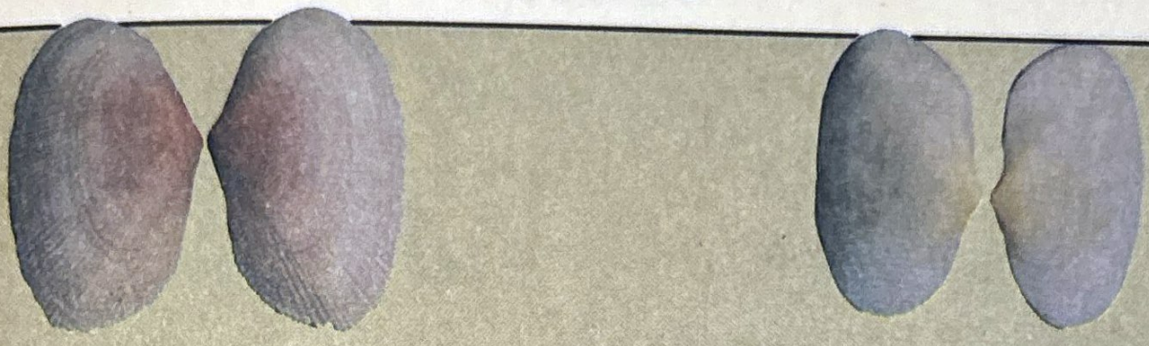
Pennsylvania Lucina
Linga pennsylvanica

Broad-Ribbed Cardita
Carditamera floridana

Florida Spiny Jewel Box
Arcinella corunata

Spiny Paper Cockle
Popyridea soleniformis

PLATE 5



Gaudy Asaphis, yellow & orange
Asaphis deflorata

Coquinas
Donax variabilis

Rose Petal Tellin
Tellina lineata

Lined Tellin
Tellina alternata

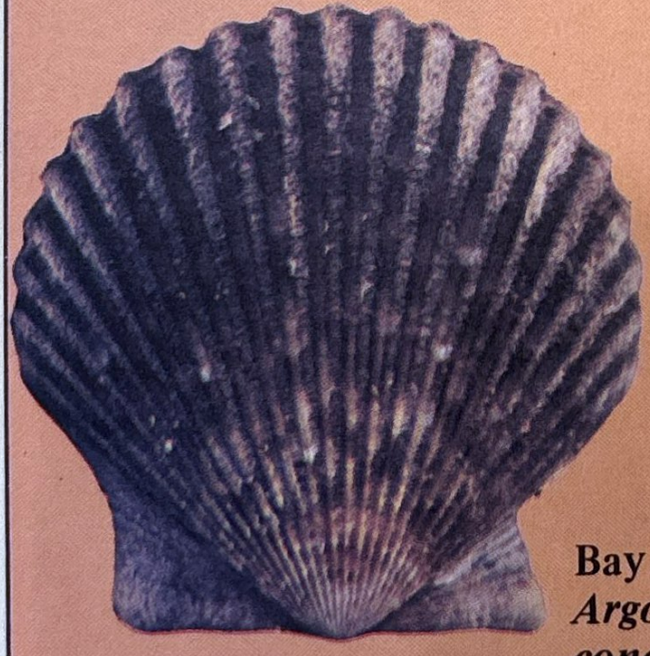
PLATE 6

Cat's Paw
Plicatula gibbosa

Coon Oyster
Lopha frons

Calico Scallop
Argopecten gibbus

Ornate Scallop
Chlamys ornata



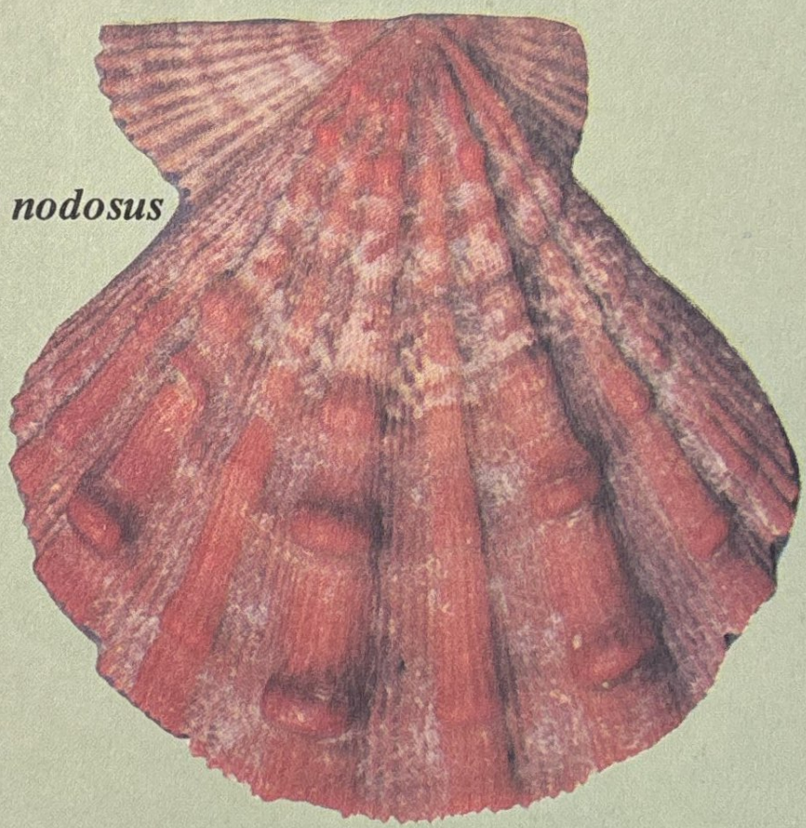
Bay Scallop
Argopeaten irradians concentricus

Panama Shell
Oliva sayana

PLATE 7

Nutmeg Shell
Cancellaria reticulata

Lion's Paw
Lyropecten nodosus



Atlantic Wing Oyster
Male Female
Pteria colymbus

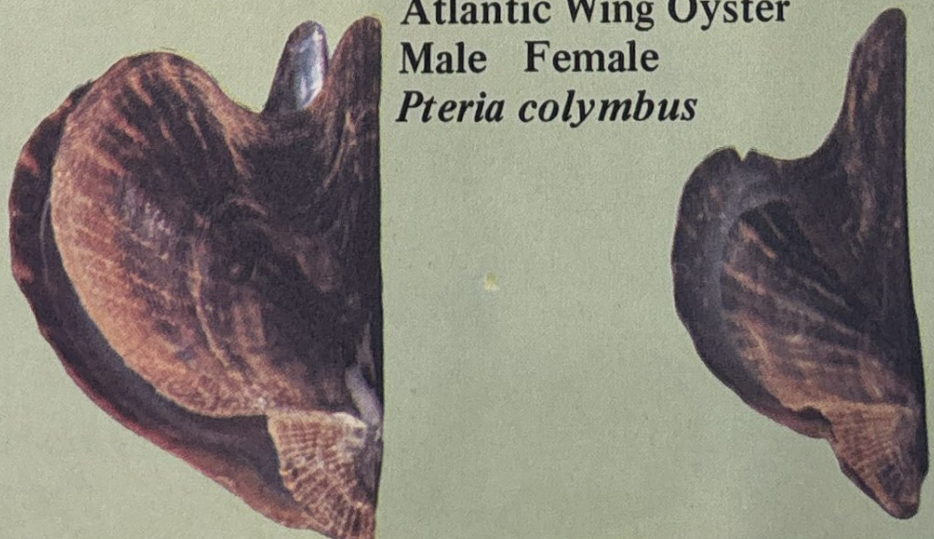


PLATE 8

Measled Cowry
Cypraea zebra

Sunray Venus
Macrocallista nimbosa

Shark Eye
Polinices duplicata

PLATE 9

Scotch Bonnets
Phalium granulum

Apple Murex
Murex pomum

Lace Murex
Murex florifer dilectus

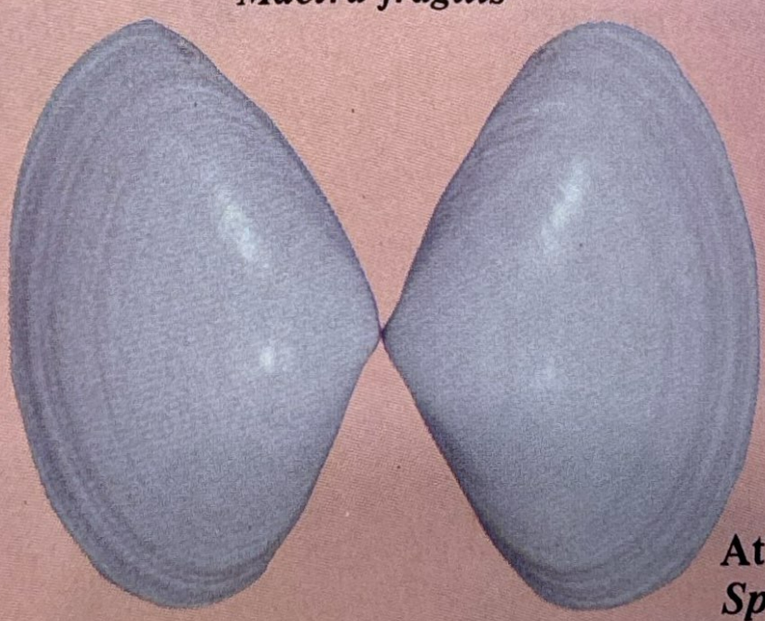
PLATE 10

Sundial Shell
Architectonica nobilis

Florida Worm-Shell
Vermicularia knorri

Fargo's Worm-Shell
Vermicularia fargoi

Fragile Atlantic Mactra
Mactra fragilis



Atlantic Surf Clam
Spisula solidissima

PLATE 11

King's Crown
Melongena corona

Lightning Whelk
Busycon contrarium

PLATE 12

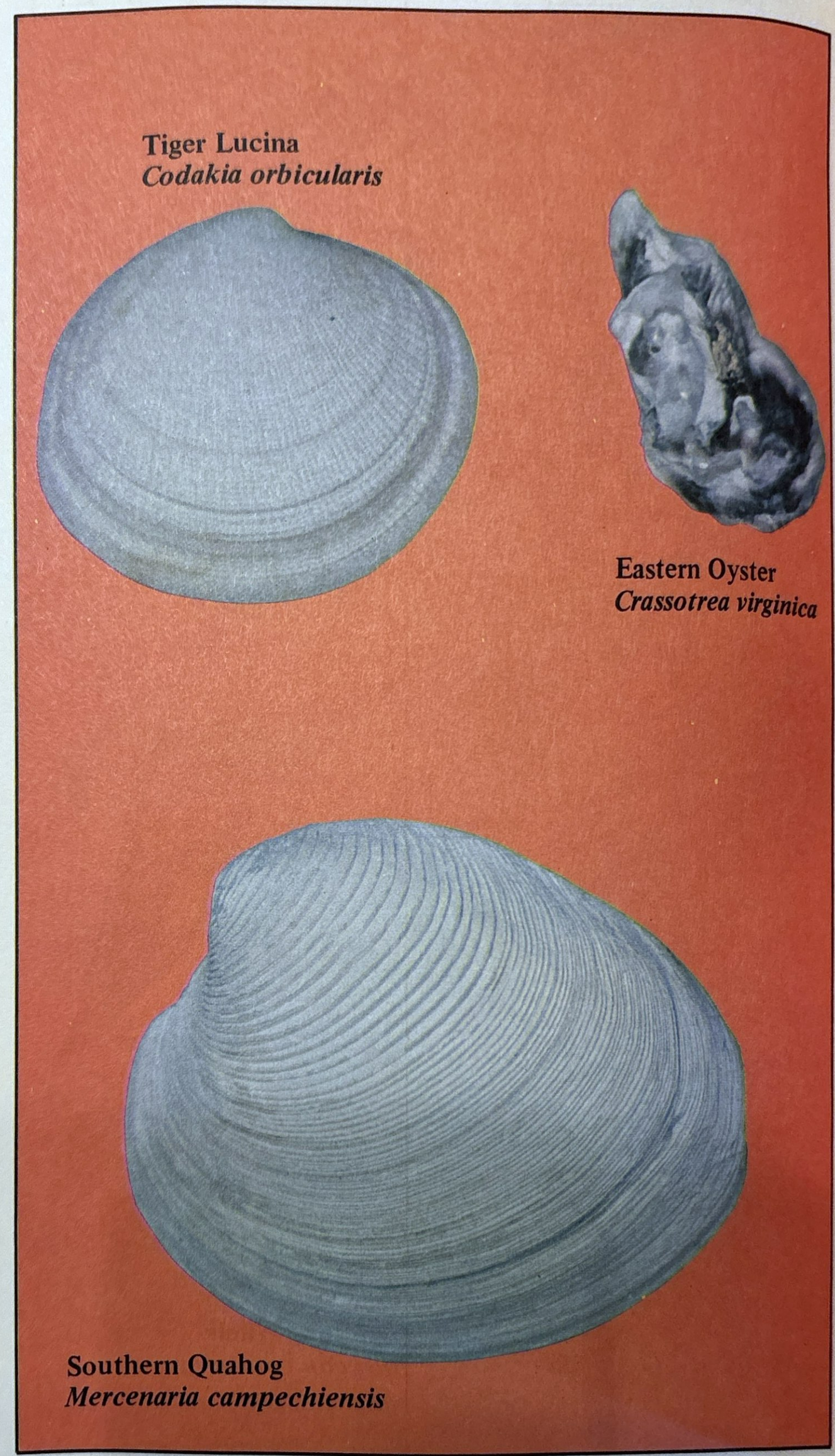

Tiger Lucina
Codakia orbicularis
Eastern Oyster
Crassotrea virginica
Southern Quahog
Mercenaria campechiensis

PLATE 13

Pearly Oyster
Pinctata imbricata

Saw-Toothed Pen Shell
Atrina serrata

Stiff Pen Shell
Atrina rigida

PLATE 14

Keyhole Limpet
Diodora cayensis

Florida Top Shell
Calliostoma euglyptum

Knobby Top
Turbo castanea

Purple Semele
Semele purpurascens

White-Crested Tellin
Tellidora cristata

White Atlantic Semele
Semele proficua

PLATE 15

Crown Cone
Conus regius

Dislocated Auger
Terebra dislocata

West Indian Bubble
Bulla occidentalis

Turkey Wing
Arca zebra

White Transverse Ark
Andara tranversa

PLATE 16

Sunrise Tellin
Tellina radiata

Disc Dosina
Dosinia discus

Checkerboard Clam
Macrocallista maculata

Turkey Wing and Ark

TURKEY WING

Arca zebra

Average size 2 inches; largest 3 inches; edible.

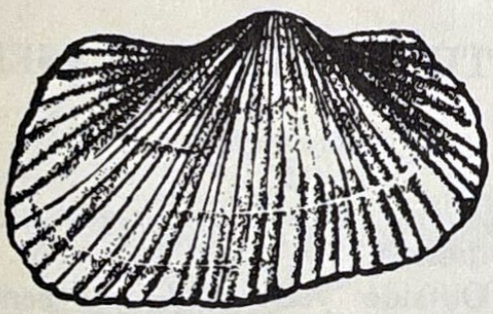
White background with brown markings, in zigzag pattern. Interior tinged with lavender; deeper lavender bordering margin.

Surface of shell gives appearance of being sculptured, with strong radial ribs and thread-like markings. Has a long narrow hinge line with numerous small teeth.

Found attached to rocks by its byssus.

Used widely for making shell novelties.

Native to the Florida East and West Coast, also from North Carolina to Bermuda.



WHITE TRANSVERSE ARK

Anadara transversa

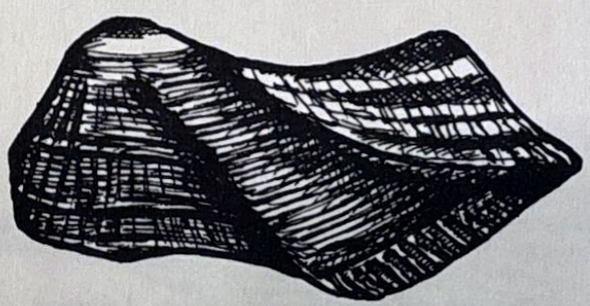
Average size ¾ inch; largest 1¼ inches; non-edible.

White inside and outside.

Box-shaped with left valve overlapping right valve. Ligament fairly long. Ribs on left valve usually beaded, but right valve rarely so; 30 to 35 ribs per valve. Periostracum brownish-gray.

Fairly common in mud below water line.

Native from Cape Cod to Florida and Texas.



NOAH'S ARK

Arca imbricata

Also called MOSSY ARK.

Average size 1½ inches; largest 2½ inches; edible.

Color brownish—the outer skin is quite heavy and brown. The shell itself is purplish-white inside and out.

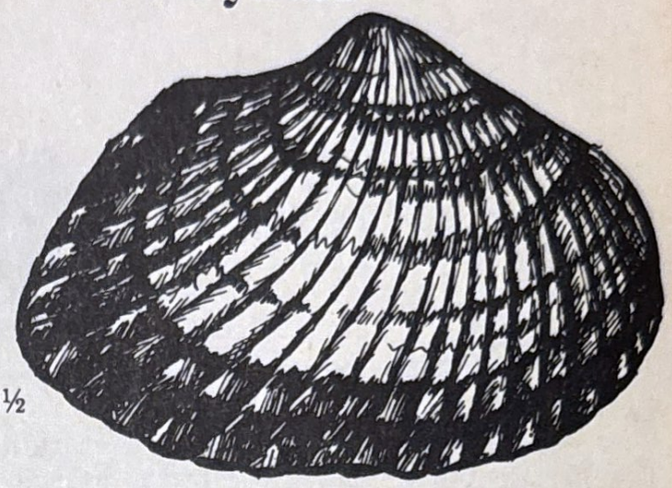
The shell is rather elongated. The front end is round and the back shaped like the keel of a ship.

It has four or five beaded ribs. The rest of the surface is cross-ribbed with growth lines. It has red blood and a fringe of eyes on the mantle's edge.

Found under rocks in shallow water. It may also be found as a fossil in beds south of Lake Okeechobee, Florida.

Native from North Carolina to the West Indies.

Ark, Mussel and Oyster



PONDEROUS ARK

Noetia ponderosa

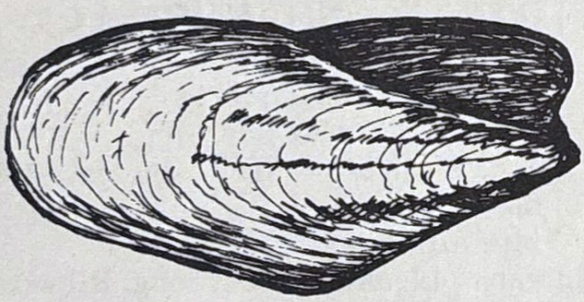
Average size 2 inches; largest 2½ inches; edible.

A white shell with black skin.

Viewed from the end, it is heart-shaped, thick, box-like and ribbed—the ribs raised and square, split down center by an engraved line.

Found in shallow water. A sand dweller.

Native from Virginia to Key West, Louisiana and the Gulf of Mexico, it is found more abundantly in the south.



TULIP HORSE MUSSEL

Modiolus americana

Average size 1 inch; largest 4 inches; non-edible.

Outside yellowish-brown periostracum, underneath, a rose color.

Sometimes streaked with light purple. Interior dull white stained rose, bluish or brownish.

The surface is smooth with a shiny periostracum. The anterior end if short and narrow, the posterior end broadly rounded. The shell is thin and moderately high.

Found rather commonly on our southern shores. Sometimes found attached to Gorgonias or commonly washed ashore in clusters.

Native from North Carolina to the West Indies.

ATLANTIC WING OYSTER

Pteria colymbus

Average size 1½ inches; largest 3 inches; edible.

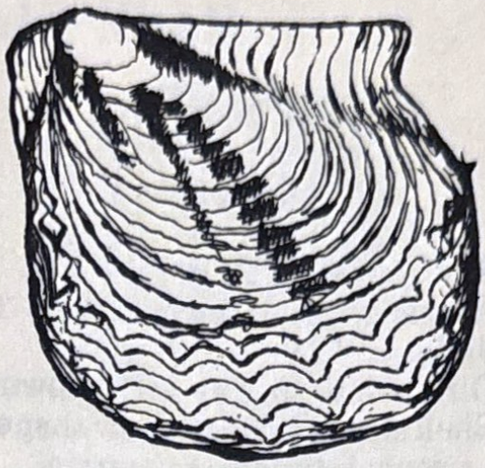
Outside color can be brown, black or brown-purple with broken lines of cream or white. Interior pearly with a margin of purplish-black with the cream rays showing through.

Fairly thin-shelled. It is obliquely oval with a long extension of the hinge line toward the posterior end. Has a strong anterior notch for the byssus. Sometimes found attached to Gorgonia.

Common from low water to several fathoms.

Native from North Carolina to Florida and the West Indies.

Oyster and Pen Shell



PEARLY OYSTER

Pinctata imbricata

Also called the ATLANTIC PEARL OYSTER.

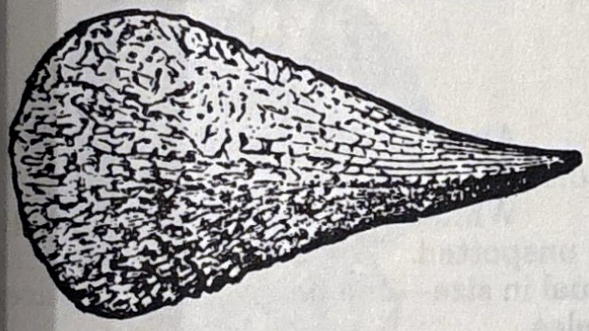
Average size 1½ inches; largest 3 inches; edible.

The color varies from brown to green, mottled with purplish-brown or black. The inside is pearly with a brown border.

A flat rather square shell, usually has scaly projections arranged concentrically.

Found in deep water, is often brought in by the sponge fishermen, and found in shallow water attached to rocks.

Native from South Carolina to Florida, to Texas and West Indies.



SAW-TOOTHED PEN SHELL

Atrina serrata

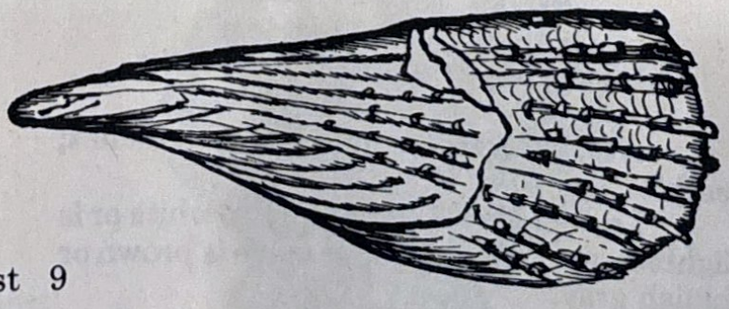
Also called HALF-NAKED PEN SHELL.

Average size 6 inches; largest 10 inches; edible.

Brownish and scaly, with iridescent lining.

Hinge is straight and outside edge curved. Thin and fragile. Has a smoky appearance and horny texture. At the pointed end the scales are very thin.

Native from North Carolina to Florida, to Texas and West Indies.



STIFF PEN SHELL

Atrina rigida

Average size 5 inches; largest 9 inches; edible.

Dull reddish-brown; interior pearly and iridescent. A triangular-shaped shell with the hinge side straight and opposite side curved. Has a horny texture with erect, prickly spines.

An abundant shell on the Florida West Coast, sometimes found attached to mangrove roots, often on the beaches.

Native from North Carolina to the Caribbean and the Gulf of Mexico.

Cat's Paw and Scallop

CAT'S PAW

Plicatula gibbosa

Also called KITTEN'S PAW.

Average size ½ inch; largest 1 inch; non-edible.

Dirty white to gray with brownish-red or purplish lines on the ribs.

Shell strong and cat's paw shaped, with heavy ribs numbering 5 to 7, which gives the valves a wavy interlocking margin.

Found in piles of shells along the intertidal lines. Fairly common.

Native from North Carolina to Florida and the Gulf States and the West Indies.

ORNATE SCALLOP

Chlamys ornata

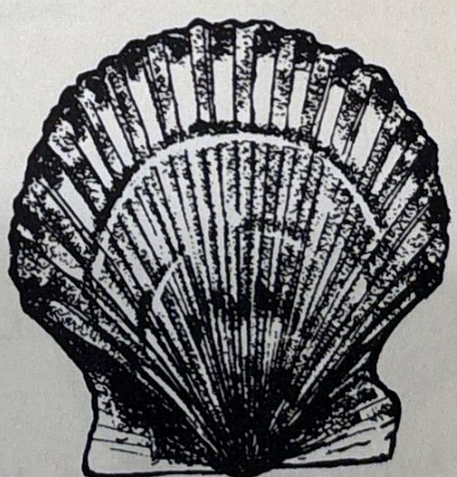
Average size 1 inch; largest 1½ inch; edible.

White, spotted with red and purple. About twenty ribs—a few generally unspotted. The ribs have sharp scales especially near margins. The wings are unequal in size—one being scarcely noticeable. Beach-worn shells have usually lost their scales.

Found in shallow water, among the seaweeds.

These fragile little shells are used extensively in making shell jewelry.

Native to southern Florida to the West Indies.



BAY SCALLOP

Argopecten irradians concentricus

Average size 2 inches; largest 3 inches; edible.

Lower valve is commonly all white or is lightest in color. The upper valve is brown or bluish gray.

19 to 21 squarish ribs. Lower valve is fatter than the upper valve.

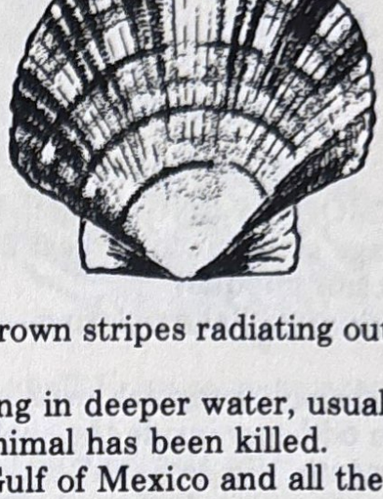
Found in shallow waters and is the most common edible shell.

Native from Virginia, Georgia, Louisiana to Tampa, Florida.

The "Argopecten irradians amplicostatus" has only 12 to 17 ribs. The lower valve is commonly white while the upper valve is dark. It has high squarish ribs that are slightly rounded. It is more gibbose than concentricus.

Ranges from Central Texas to Mexico

Scallop or Pectin Shell



FAN SHELL

Pecten ziczac

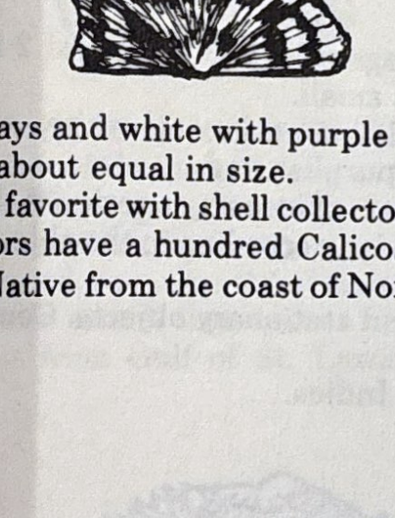
Also called ZIGZAG SCALLOP.

Average size 2 inches in diameter; largest 3 inches; edible.

A pinkish-violet shade at apex with reddish-brown stripes radiating out. Circular markings are usually yellow or pale pink.

A shell much like shallow water scallops, living in deeper water, usually 30 feet deep. Often found cast on the beaches when the animal has been killed.

Native to Florida West Coast waters on the Gulf of Mexico and all the way from North Carolina to West Indies.



CALICO SCALLOP

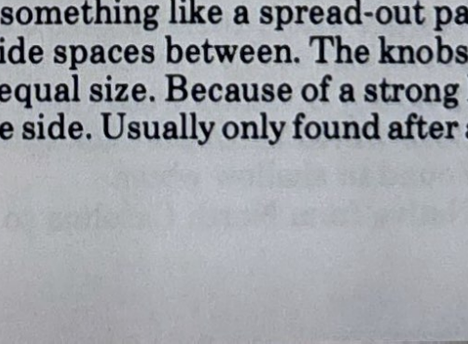
Argopecten gibbus

Average size 1 inch; largest 2 inches; non-edible.

Found in many colors, usually with bright orange, lavender, purple, brown with white rays and white with purple markings. Rarest color is lemon-yellow; 19 to 21 ribs. Wings about equal in size.

A favorite with shell collectors, striving to get the greatest variety of shadings. Some collectors have a hundred Calicos, all of different color combinations.

Native from the coast of North Carolina to the Gulf of Mexico and the West Indies.



LION'S PAW

Lyropecten nodosus

Also called KNOBBY SCALLOP.

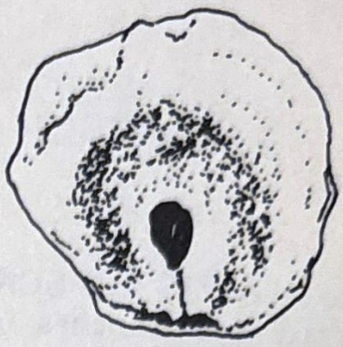
Average size 3 inches; largest 4 inches; edible.

Deep red or dark orange.

This is a scallop-shaped shell, but does look something like a spread-out paw of a lion, when you study it. There are heavy ribs and wide spaces between. The knobs along the ribs further identify it. Also the ears are not of equal size. Because of a strong hinge, perfect pairs are often found. Considered on the rare side. Usually only found after a hard northwest blow.

Native to the Florida coasts.

Jingle and Oyster



JINGLE SHELL

Anomia simplex

Also called BABY'S FOOT SHELL; SMOOTH JINGLE SHELL.

Average size ½ inch; largest 2 inches; edible (but not popular).

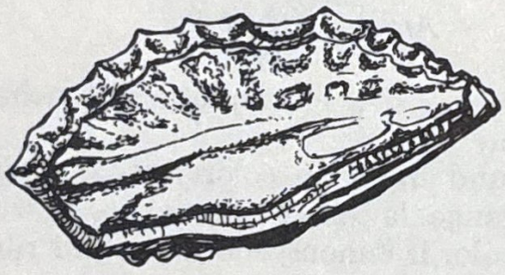
Translucent. Solid coloring—orange, yellow or salmon-pink, white, slate-gray or jet.

The shape is irregular, usually determined by the object to which it is attached. There is an odd scar inside the shell near the valves that resembles a baby's footprint.

The name "Jingle Shell" is derived from the fact that a handful of them makes a pleasant jingling sound when shaken.

Found on both coasts of Florida in great numbers. Sometimes beaches are piled high with them. They are often attached to submerged objects, so thickly that one grows on top of another. Oyster dredges bring them up in quantity.

Native from Massachusetts to Florida, to Texas and the West Indies.



COON OYSTER

Lopha frons

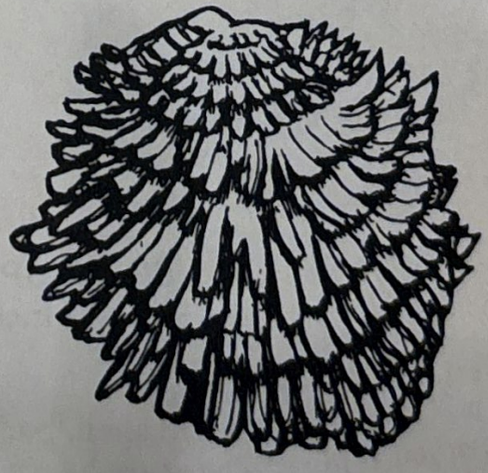
Average size 1 inch; largest 2 inches; edible, but small.

Interior translucent white, exterior white and purplish-red.

Beaks curved; often elongated and attached to stem of trees by a series of clasping projections of the shell, but the shell may be oval in design according to the object it has attached itself to.

Found on mangrove trees or attached to rocks and stationary objects. Coons love them. They are too small for marketing commercially.

Native to Florida, the Gulf Coast and the West Indies.



LEAFY ROCK OYSTER

Chama macerophylla

Also called LEAFY JEWEL BOX.

Average size 1 inch; largest 3 inches; edible.

A variety of colors from violet to a lavender-pink or lemon-yellow.

Both valves have lace-like, ruffled edges and an irregular shape.

Found in shallow water.

Native from North Carolina to all Florida coasts and the West Indies.

Oysters and Cardita

FLORIDA SPINY JEWEL BOX

Arcinella cornuta

Average size 1 inch; largest 1½ inches; edible.

White or ivory-white in color. Inside white or tinted with orchid.

Rectangular in shape, it is a heavy, rather inflated shell. From seven to nine rows of long, thick spines.

Found in warm seas from 3 to 40 fathoms. Often washed ashore.

Native from North Carolina to Florida and Texas.

EASTERN OYSTER

Crassostrea virginica

Also called VIRGINIA OYSTER.

Average size 2 inches; largest 6 inches; edible.

Dirty-gray exterior; white inside with a purple scar.

This is the familiar oyster which varies greatly in size and shape. The margins are only slightly undulating or straight. The beaks are usually long and strongly curved. A heavy shell. The eggs are small, produced in large numbers at one spawning (about 50 million) and are fertilized and develop in the open water outside of the parent. They smother in mud, so oyster fishermen throw back millions of pounds of oyster shell for the tiny oysters to attach themselves to in the quiet waters of bays and inlets.

Native from Gulf of St. Lawrence to the Gulf of Mexico and the West Indies.

BROAD-RIBBED CARDITA

Carditamera floridana

Also called BIRD WING SHELL.

Average size 1 inch; largest 1½ inches; non-edible.

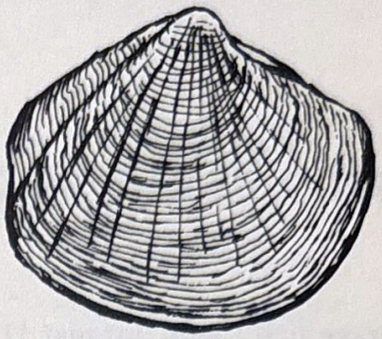
Exterior is white with purple or chestnut blotches. Interior is white.

This shell is small, thick, radially ribbed and has a byssus. Surface has 20 strong raised beaded, radial ribs. Beaks close together.

This is a common shell that is washed ashore on the Florida beaches. Used in making jewelry.

Native to Florida and Mexico.

Lucines



MANY-LINED LUCINA

Parvilucina multilineata

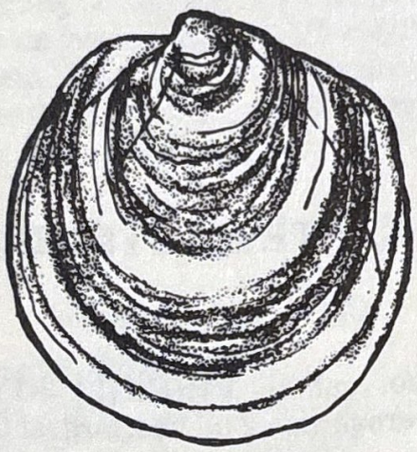
Average size ¼ inch; largest ⅜ inches; non-edible.

White, both interior and exterior.

Moderately thick shelled, round and obese. Radial ribs and concentric lines. Inner margin very finely denticulate. The irregular, concentric hump in the shell is caused by growth after a long rest.

Common from beach to 120 fathoms.

Native from North Carolina to both sides of Florida.



FLORIDA LUCINA

Pseudomiltha floridana

Average size 1 inch; largest 1½ inches; non-edible.

White with a dirty white periostracum.

Shell round and strong. Hinge plate fairly wide and strong, and the teech barely defined. Smooth except for a few weak growth lines. Found in moderately shallow water.

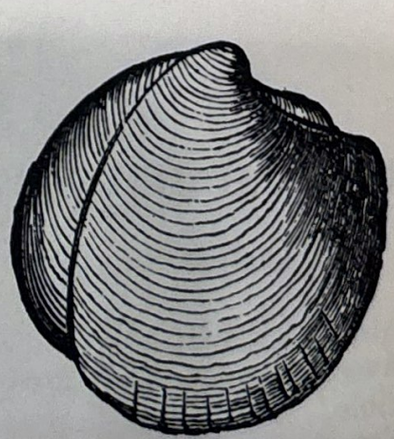
Some shell shops call these shells the Face Shell, because they are used for the faces of shell dolls.

The beaks turn forward and are small, but prominent. This shell may be distinguished from the other members of the lucinas by its rather indistinct posterior fold and it is not so thick.

Ranges from the west coast of Florida to Texas.

PENNSYLVANIA LUCINA

Linga pennsylvanica



Average size 1 inch; largest 2 inches; non-edible.

Pure white with a yellow periostracum.

Concentric ridges distinct and delicate. Beach worn specimens smooth and shiny. Lunule heart-shaped.

A small and extremely thick shell distinguished by a diagonal furrow about the posterior region. Ovate and inflated. The beak is inclined forward. There are widely, separated, sharp, concentric ridges on the outer surface.

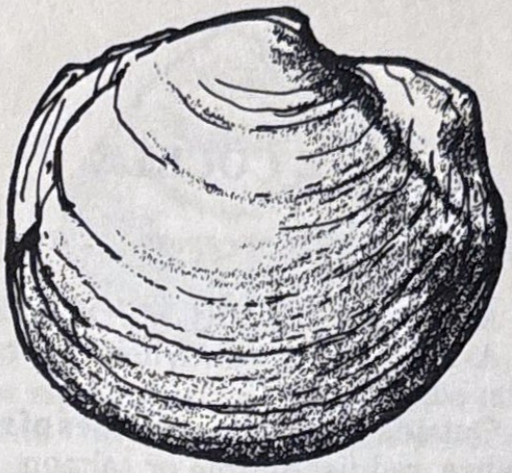
Found in shallow water.

Native from North Carolina to the Florida East Coast and the West Indies.

Buttercup, Lucina and Cockle

BUTTERCUP

Anodontia alba



Also called APRICOT SHELL.

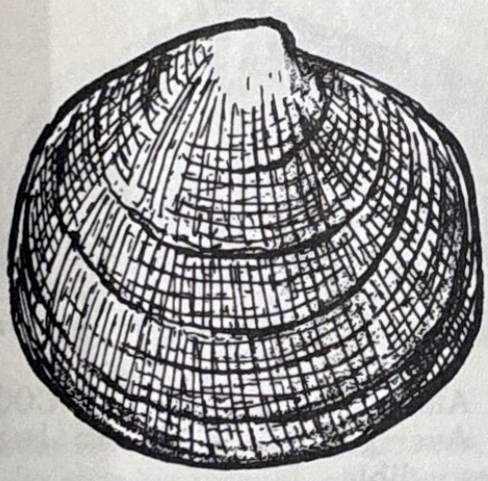
Average size 1½ inches; largest 2 inches; non-edible.

White outside, inside butter-colored or yellowish-orange. Another species *Anodontia philippiana* is chalky white, with no orange color in interior.

A very beautiful and delicate bowl-shaped shell, with characteristic of both valves being of equal size. Seldom are both halves of the shell found since the hinge is very weak.

A deep water mollusk, which reaches the beach when tidal flow washes it up.

Native from North Carolina to Florida, to the Gulf states and the West Indies.



TIGER LUCINA

Codakia orbicularis

Average size 2½ inches; largest 3 inches; non-edible.

Pure white tinged with yellow or red-violet around edges.

A large shell, fairly thick. Ridges radiating from the beak are crossed by fine concentric lines.

Usually found on sandy bottoms. The largest of the species in southern waters.

Native to all coasts of Florida and West Indies.

YELLOW COCKLE

Trachycardium muricatum

Average size 2 inches in height; largest size 2½ inches; edible.

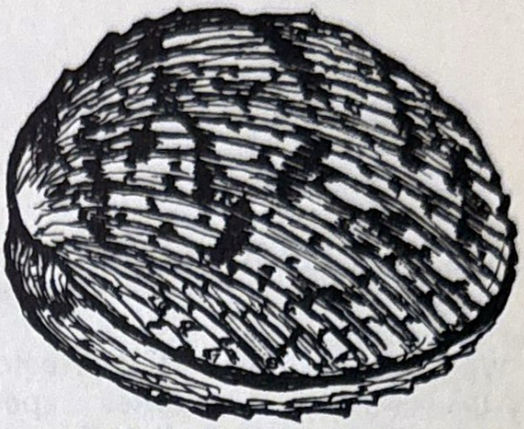
Outside of shell light cream or yellowish with splotches of reddish-brown.

Inside white, tinted with yellow.

Thick, oval, with 30 to 40 moderately scaled radiating ribs. Margins deeply crenulated. A common shallow water species.

Native from North Carolina to West Indies and Texas.

Cockles



ROSE COCKLE

Trachycardium egmontianum

Also called PRICKLY COCKLE.

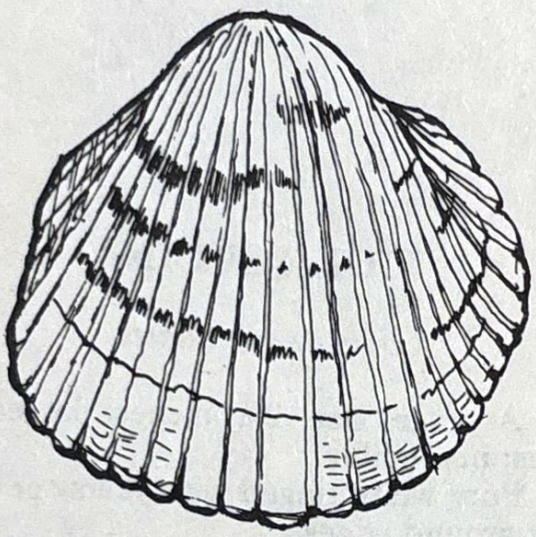
Average size 1 inch in height; largest 2 inches; edible.

Outside white with splotches of reddish-brown and tan. Inside white with splotches of orange, reddish-purple or salmon.

Shell is thick and more elongate than oval as in the yellow cockle. Has 27 to 31 strong, prickly, radial ribs.

A common shallow water species especially on the Gulf side.

Native from South Carolina to Florida and the West Indies.



LARGE BROWN COCKLE

Dinocardium robustum van hyningi

Also called BIG BROWN COCKLE.

Average size 3 inches; largest 4 inches; edible.

A color pattern of buff, yellowish-brown and reddish-brown in irregular bands. The interior is lighter brown with a white band around the margin.

A large thick shell. Has greater dimensions than others of the family, sometimes as much as 5 inches across. The living mollusk is well equipped with strong muscles. The largest of the species.

Native to the Florida Beaches from Clearwater south on the West Coast to Cape Sable.

LARGE EGG COCKLE

Laevicardium laevigatum

Also called BUTTER SHELL; COMMON EGG COCKLE.

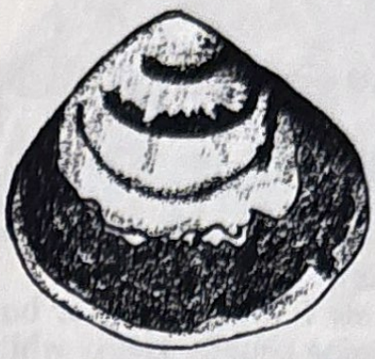
Average size 1 inch; largest 2 inches; non-edible.

Cream color, tinged with yellow, concentric markings of light brown; interior polished white, sometimes pinkish tinged.

This shell is smooth and shiny, those on the East Coast have the appearance of being lacquered. Unusual characteristic is the fact that West Coast of Florida shells are pink, while the East Coast shells are yellowish. Especially abundant in Tampa Bay area.

Native from North Carolina to Florida and the West Indies.

Cockle and Clam



LITTLE EGG COCKLE

Laevicardium mortoni

Also called MORTON'S EGG COCKLE.

Average size ½ inch; largest 1 inch; non-edible.

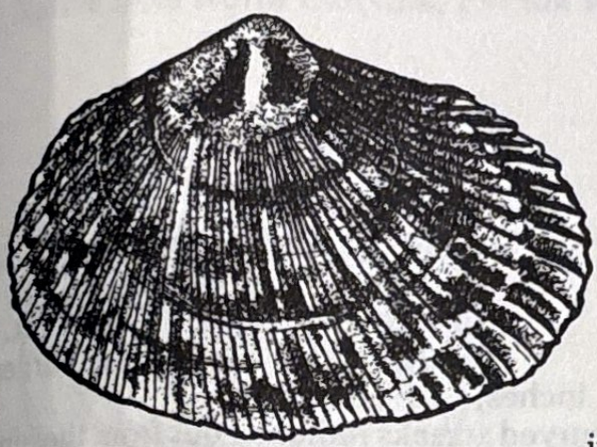
White with tannish-brown markings, some zigzag lines, circular lines and dots.

A glossy, ovate shell, moderately inflated and fairly thin. The inside is white and polished with the color markings showing through.

A common shallow water species.

Wild ducks like to feed on them.

Native from Cape Cod, Massachusetts to Florida and the Gulf of Mexico.



SPINY PAPER COCKLE

Papyridea soleniformis

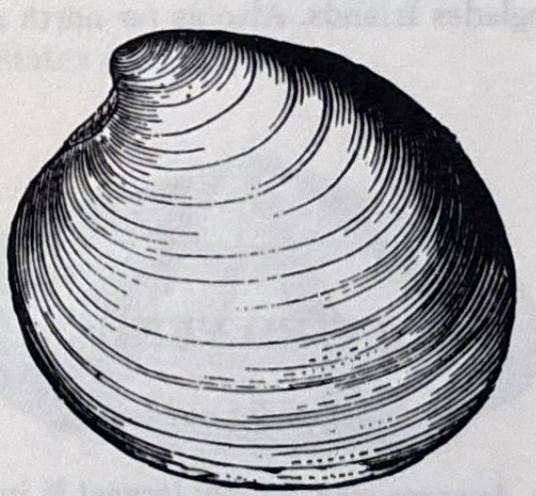
Average size 1 inch; largest 1½ inches; non-edible.

Outside white or cream with rose, orange, yellow flecks or mottlings. Interior glossy with color showing through of violet and white, sometimes orange and brown.

Shell moderately fragile; ribs are inconspicuous in the center of the valves, but raised near the ends.

Moderately common from low tide to several fathoms.

Native from North Carolina to Florida, West Indies and Gulf of Mexico.



SOUTHERN QUAHOG

Mercenaria campechiensis

Average size 2 inches; largest 5 inches; edible.

Interior white; outside dirty white.

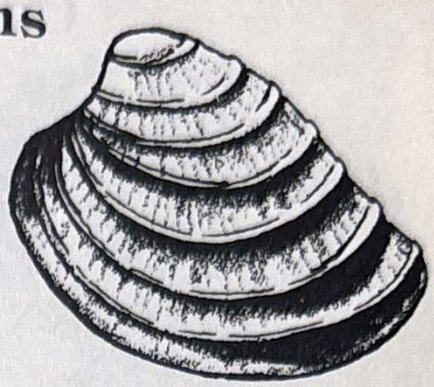
A heavy shell, obese; sculpture of numerous, concentric lines of growth. Interior is smooth and glossy. Lunule heart-shaped. Inner margin crenulate.

The Northern Quahog is used commercially for chowders and as clams-on-the-half-shell or "Cherrystones," while the Southern Quahog is common, but has not been exploited commercially to a great extent.

Found in bays in shallow water.

Native from Chesapeake Bay to Florida, Texas and Cuba.

Venus Clams



CROSS-BARRED VENUS

Chione cancellata

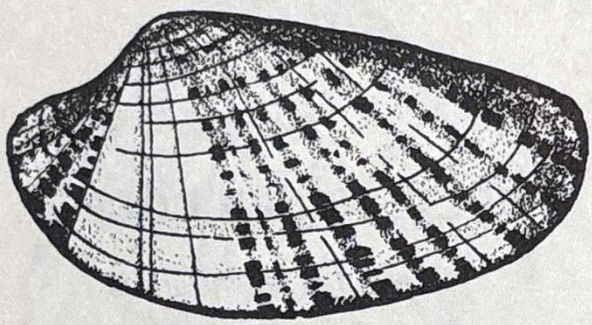
Average size ½ to 1 inch; largest ¾ inches; edible.

Outside is white, gray or buff, or the brown species found on the east coast of Florida. Lining usually glossy white with purple, though it may be deep orange.

There are narrow ridges across the surface of the valves, making a cross-barred pattern. This shell is roughly triangular.

Found in shallow water.

Native from North Carolina to Florida, to Texas and the West Indies.



SUNRAY VENUS

Macrocallista nimbosa

Also called GIANT CALLISTA.

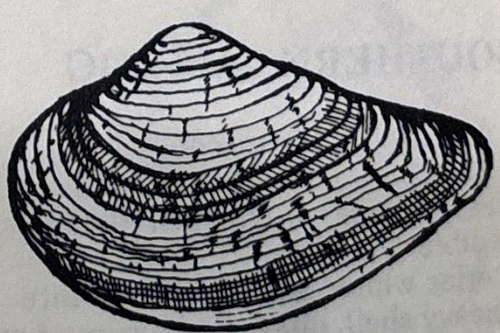
Average size 3 inches; largest 5 inches; edible.

Violet-gray with darker rays, slightly curved streaks radiating out from the hinge in a darker color. Interior dull white—a tinge of red over central area. Fresh specimens, salmon-pink. Glossy.

A longish, clam-type shell with glossy, smooth surface. An exceptionally pretty shell.

Found and gathered in large numbers on the shelling coasts. Used for ash trays and often as unusual dishes. Indians used them as eating utensils as well.

Native to the Florida West Coast, St. Petersburg to Marco, or beginning of the Everglades Islands. Also as far north as North Carolina.



POINTED VENUS

Anomalocardia auberiana

Average size ½ inch; largest ¾ inches; non-edible.

Creamy-white, white, tan with brown or purple specklings. Inside white, purple or brown.

Sharp, wedge-like rostrum at the posterior end. Shell light weight with a tiny beak. Small concentric ribs which are more prominent near the beak. Lunule oval.

Found on sandy shores. Brackish water specimens are dwarfed.

Native from North Carolina to Florida to Texas.

Clam and Tellin

CHECKERBOARD CLAM

Macrocallista maculata

Also called CALICO CLAM; SPOTTED CLAM.

Average size 1½ inches; largest 2½ inches; edible.

Exterior cream with checkerboard markings of brownish-red; interior polished white with yellow or faint lavender markings.

A moderately strong shell that is ovate. The surface is porcellaneous with very fine radial lines. The Venus shells are named for the Goddess Venus and they are noted for their graceful lines and beauty of color and sculpture. These shells are very popular with collectors.

Found in shallow water where there is a sandy bottom. Single valves are common on the beach in various locations.

Native from North Carolina, Florida to the West Indies.

DISK DOSINIA

Dosinia discus

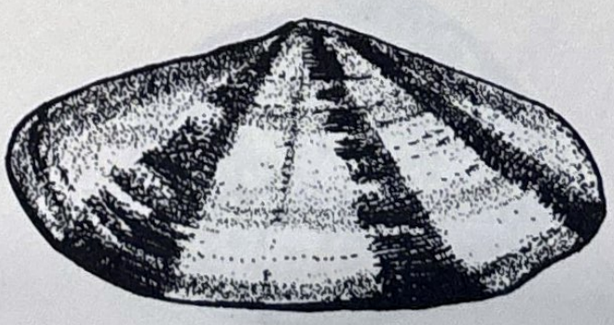
Average size 2 inches; largest 3 inches; edible.

Pure white both inside and outside with a yellow periostracum.

Moderately thin; circular in outline; small but prominent beak; compressed. Concentric ridges about 20 to 25 per inch. Another species is Elegant Dosinia which has about 50 concentric ridges to the inch.

Gathered just off-shore in moderately shallow water, and paired valves are often common on southern beaches.

Native from Virginia to Florida, the Gulf States and Bahamas.



SUNRISE TELLIN

Tellina radiata

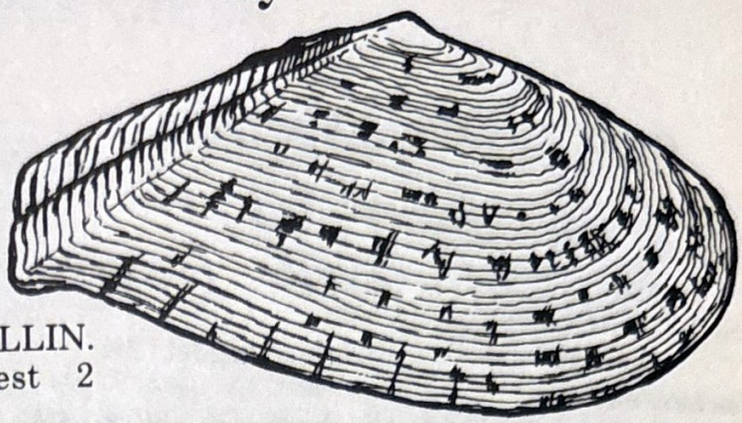
Average size 2 inches; largest 4 inches; edible.

Polished white with pale yellow or pink from highest point to the margins. Interior all white, with the external color showing through in strong light. Beaks often red-tipped.

Elongated shell with striking coloring. Strong valves often found with the two halves still joined long after clam is dead.

Native from North Carolina to Florida and the Carribean. They are more common in the West Indies than in Florida.

Tellin Family



INTERRUPTED TELLIN

Tellina listeri

Also called SPECKLED TELLIN.

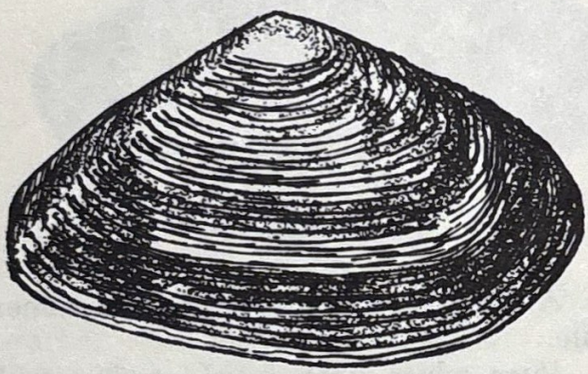
Average size 1 inch; largest 2 inches; non-edible.

Creamy-white with purplish-brown rays or specklings on the exterior. The interior is white with the color showing through.

The shell is moderately thin, long, flattened and not polished. The anterior is rounded and the posterior end is twisted. The surface is sculptured with strong concentric lines.

Found in moderately shallow water, but buries itself deeper in the mud or sand than most bivalves.

Native from North Carolina to Brazil.



LINED TELLIN

Tellina alternata

Also called ALTERNATE TELLIN.

Average size 2 inches; largest 3 inches; edible.

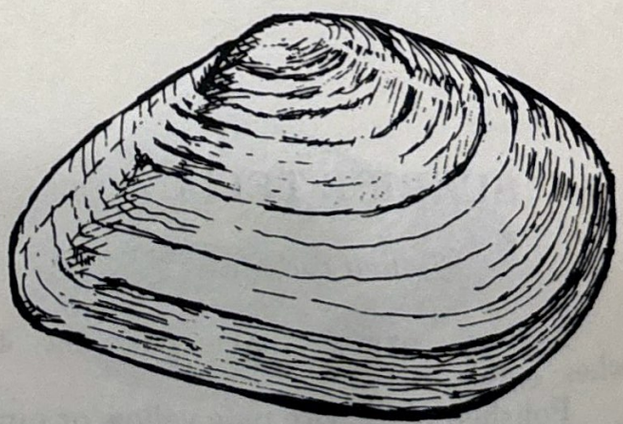
Exterior white flushed with yellow or pink; interior glossy pink or yellow.

Shell solid, elongated and compressed; moderately pointed and slightly twisted posterior end; anterior end rounded.

Sculpture has numerous evenly spaced, fine, concentric grooves.

Found in shallow water. Common.

Native from North Carolina to Florida and the Gulf States.



ROSE PETAL TELLIN

Tellina lineata

Average size 1½ inches; largest 2½ inches; edible.

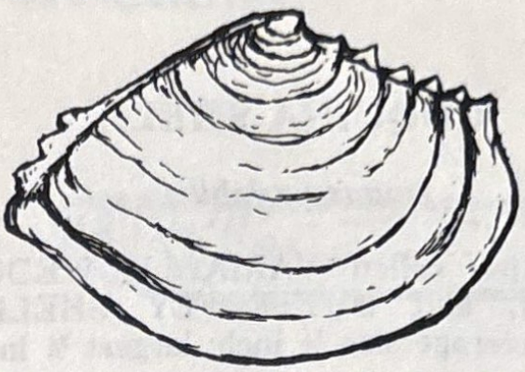
These tellins are found in two colors, white or watermelon red.

A moderately solid shell, inflated slightly, moderately elongate. The outside of the shell seems opalescent and smooth, but on closer inspection has fine concentric grooves.

Found in shallow water in bays.

Native to all Florida coasts and the West Indies.

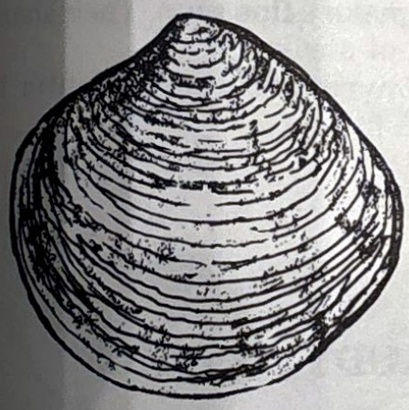
Tellin and Semele



WHITE CRESTED TELLIN

Tellidora cristata

Also called PANDORA'S BOX.
Average size 1 inch; largest 1½ inches; edible. White in color.
Triangular-shaped with one flat valve and the other somewhat inflated. Margins at the back of valves are saw-toothed. Faint concentric ridges on surface.
Found in mud or sand close to shore.
Native from North Carolina to the west coast of Florida and Texas.



WHITE ATLANTIC SEMELE

Semele proficua

Also called FLORIDA SEMELE.
Average size 1 inch; largest 1½ inches; non-edible.
External white or yellowish white; interior white or yellowish. Florida species commonly have a speckling of pink or purple.
Shell is thin and compressed, oval, with beaks almost central. The sculpture has fine concentric lines. Interior is glossy.
Found in shallow water, buried in sandy mud.
Native from North Carolina to Florida and the West Indies.

PURPLE SEMELE

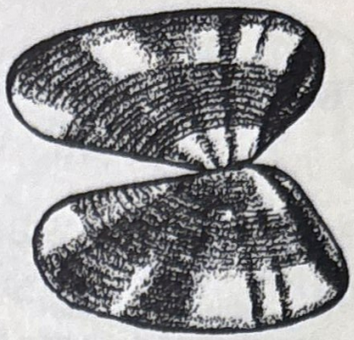
Semele purpurascens

Average size 1 inch; largest 1½ inches; non-edible.
White, gray or cream with purple splotches or zigzag lines on the outside. On the inside white blotched with purple or orange. Some specimens are yellow instead of white.
Shell oval with both ends rounded. Posterior end twice the length of the anterior. Thin-shelled, smooth except for very fine concentric growth lines.
Found in shallow water.
Native from North Carolina to Florida and the West Indies.

Coquina, Asaphis and Razor

COQUINA SHELL

Donax variabilis



Also called VARIABLE WEDGE SHELL and BUTTERFLY SHELLS.

Average size ½ inch; largest ¾ inch; edible.

Found in all colors and patterns of the rainbow. The colors come in solids of yellow-brown, blue, lavender, green, pink and variations. Many are in plaid.

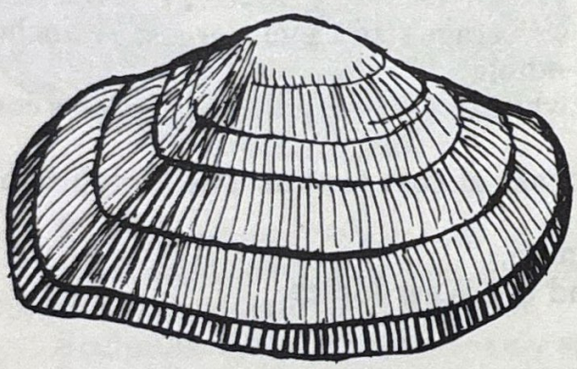
This is the little clam which creates the activity you see at the tide line of the surf, on the gulf and ocean. With the aid of a "foot" which darts out from one end, they can emerge or dig themselves under in the twinkling as a wave rolls up and recedes. Apparently this is because they are extremely light-sensitive; they rush to get back into the darkness of the sand.

They have countless uses. Washed and boiled they make a fine soup. Their shape and color make them adaptable to use in many varieties of shellcraft.

Native to all Florida coasts, especially from Daytona on the Atlantic to Panama City on the Gulf. Also found as far north as Virginia.

GAUDY ASAPHIS

Asaphis deflorata



Also called COCKLE CLAM.

Average size 2 inches; largest 3 inches; edible.

Pale yellow to orange on the outside. The interior is of the same shading, but more intense. There is usually a deep purple streak on the outer edge of the interior.

A strikingly colored shell, unusually sculptured. Beaks inflated and rolled slightly in under. Not plentiful in Florida waters but occasionally taken.

Native to Southeast Florida, the Bahamas, West Indies

PURPLISH TAGELUS

Tagelus divisus

Also called a RAZOR CLAM.

Average size 1 inch; largest 1½ inches; edible.

Whitish-purple in color with a thin, glossy brown outer skin.

The shell is thin and elongated with both ends rounded bluntly.

Found in shallow water, they live in colonies buried in the sand.

Native from Cape Cod to south Florida, the Gulf States and the Caribbean.

Razor and Surf Clams

SHORT RAZOR

Solen viridis

Also called GREEN RAZOR; GREEN JACKKNIFE CLAM.

Average size 2 inches; largest 4 inches; edible.

Pale green and white with crescent-shaped brown marks across center of shell. Has greenish-brown skin.

A thin, elongated shell with a nearly straight hinge line—the valves open at each end. There are very faint concentric wrinkles, but the surface is comparatively smooth.

Found on sand bars at low tide; also dredged in 25 fathoms. This razor clam lives in colonies and burrows into the sand vertically.

Usually found in shallow bayous, where they burrow. Difficult to catch when danger threatens, because they can burrow as fast as you can dig.

Native from Rhode Island to northern Florida and the Gulf States.

FRAGILE ATLANTIC MACTRA

Mactra fragilis

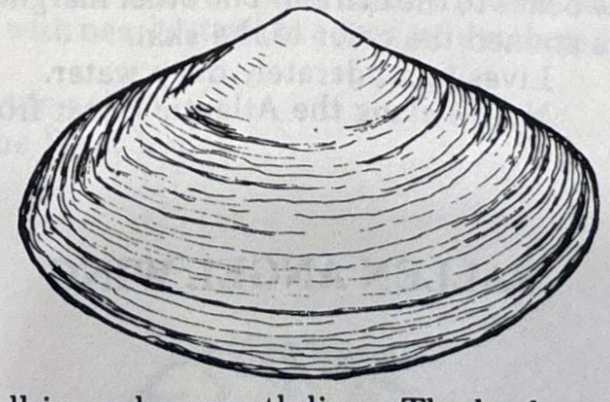
Average size 2 inches; largest 2½ inches; edible.

Polished white with a light brown or grayish skin in life.

A thin and elongated shell. The margins are sharp. Otherwise a distinct member of the Surf Clam Family.

Found in shallow water, mostly around the entrance to passes from gulf to bay waters.

Native from North Carolina to Florida to Texas, Mexico and the West Indies.



ATLANTIC SURF CLAM

Spisula solidissima similis

Average 4 to 5 inches; largest 7 inches; edible.

Color is yellowish-white with a thin yellowish-brown outer skin.

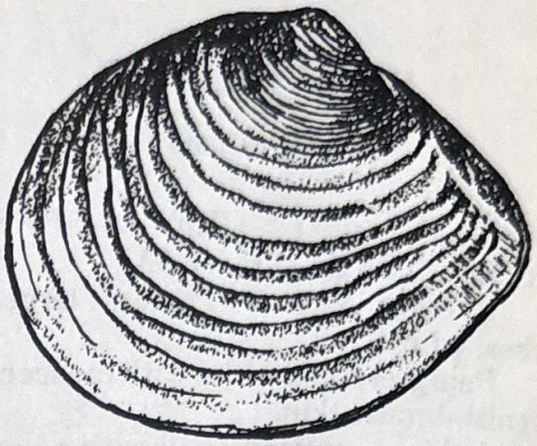
Strong and oval, rather smooth with small irregular growth lines. The beaks are central and large; the hinge strong with a spoon-shaped cavity inside. It is the largest bivalve on our Atlantic coast. Has a powerful foot which enables it to leap away from its enemies.

Found below the low water mark on ocean beaches. Fishermen drag the bottom with sharp sticks and if it passes between open valves, the clam closes upon it and is drawn to the surface. Often washed up on the beach in great numbers after severe winter storms.

Gathered for food, popular for "bakes."

Native from Nova Scotia to South Carolina. Sub-specie "similis" is more elongate and is found from Cape Cod to Florida and Texas.

Clam and Borer



SAILOR'S EAR

Raeta plicatella

Also called CHANNELED DUCK CLAM.

Average size 2 inches; largest 3 inches; edible.

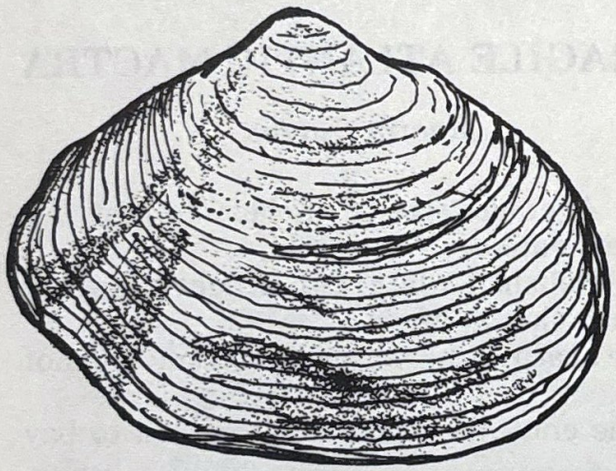
Pure white interior and exterior.

Egg-shell thin, but moderately strong. Sculpture of concentric smooth, distinct ribs which on the inside of the shell show as grooves. Posterior end slightly gaping, anterior end rounded; inflated.

"Anatina anatina" or Smooth Duck Clam has about the same shape as the Sailor's Ear, but is moderately smooth except for irregular growth lines and tiny, but distinct, concentric ribsa near the beaks; uncommon.

Found washed ashore, but rarely seen alive.

Native from North Carolina to Florida to Texas and West Indies.



CONSTRICTED MACOMA

Macoma constricta

Average size 1 inch; largest 2½ inches; edible.

A white shell with a thin yellow or gray skin.

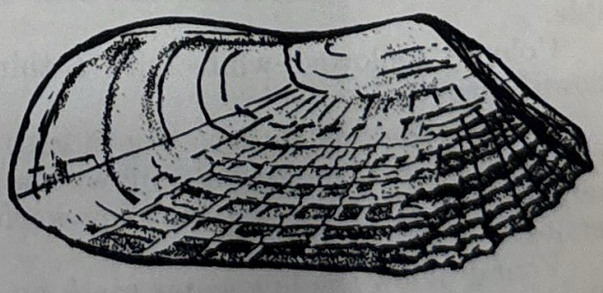
The back end is rather squared off and notched below and there is a slight fold from the beaks to the margin. The other margins are broadly rounded. Concentric growth lines are stained the color of the skin.

Lives in moderately deep water.

Native along the Atlantic Coast from Florida to Texas to West Indies.

FALLEN ANGEL WING

Barnea truncata



Also called the TRUNCATED BORER.

Average size 2 inches; largest 2½ inches; edible.

White to grayish white.

A fragile shell. Rather oblong with the back end cut off and broad at the tip. This half is smooth. There are sharp scales at the front end. The siphon is encased in a tubelike sheath and is 2 or 3 times the length of the shell.

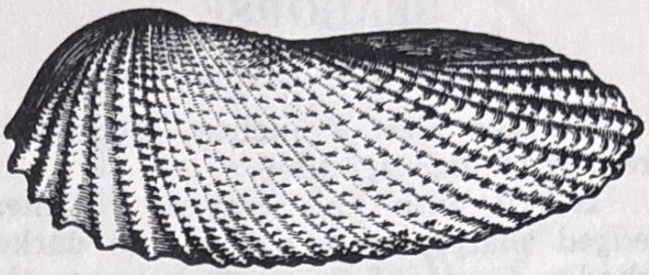
This shell burrows into mud or peat and is exposed at low tide. Because they are very delicate, it is difficult to dig them out without crushing.

Native from Massachusetts Bay to south Florida.

Angel Wing, Wood Piddock

ANGEL WING

Cyrtopleura costata



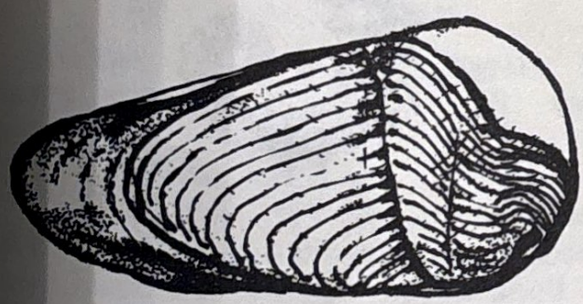
Average size 4 inches; largest 8 inches; edible.

White, with indistinct markings, (a thin gray skin in life), occasionally an irregular band of pink near the ventral margin.

This shell has also been known by the Latin name "Barnea costata" but after extensive study, Ruth D. Turner of Harvard University, announced it was definitely of the Cyropleura genus. Shaped something like a supposed "Angel's Wing," long and narrow, it is quite fragile with about 30 beaded radial ribs. The strong radial sculpture extends the entire length of the shell.

They are found mostly burrowed under the surface in shallow water, particularly in muddy spots, about three inches to three feet down. A colony of several will be found together. Spanish people consider them quite tasty.

Native to all shores on the Gulf of Mexico and from Massachusetts to the West Indies.



WOOD PIDDOCK

Martesia striata

Also called STRIATE MARTESIA.

Average size ¾ inch; largest 1¼ inches; non-edible.

Grayish-white in color.

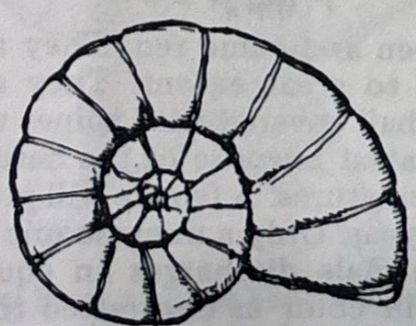
A wedge-shaped shell, the back end gaping; front margin nearly closed. Elevated, scallopy lines mark the surface. Back end tapers with nearly straight edges, to a rounded tip.

Found on floating timbers. It is a wood boring clam.

Native from West Florida to Texas and the West Indies.

RAM'S HORN

Spirula spirula



Average size 1 inch; largest 1½ inches; edible.

White-interior and exterior.

This is from the tail of a certain kind of squid. It is a chambered cone, coiled in a flat spiral. Each chamber is separated by a septum or wall that is nacreous white and fragile. Shells found cast up on the beach, but animal lives in deep water.

Native from Cape Cod to West Indies to Texas and worldwide.

OTHER SEA LIFE

SEAHORSE

Hippocampus hudsonius erectus

Average size 3 inches; largest on record 12 inches; edible.

Dusky with pale grayish blotches, edged sharply with lighter and darker shades. Some of these are between the eyes and the neck.

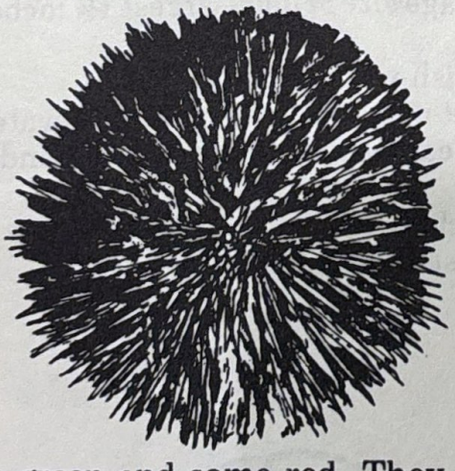
The head and neck are arched somewhat like a horse's. The body is encased in bony rings and the tail slender and tapering. It swims in an upright position and uses its tail to cling to seaweed or grass. The tail may be coiled when not in use. It has a tiny mouth at the end of the snout through which it sucks its food. One of the plate-fish.

The male seahorse has a pouch in which the female deposits the eggs, where they remain until hatched.

Intensely interesting as specimens for salt-water aquariums.

Used for jewelry and decorative purposes.

In some South American countries they are considered a table delicacy. Native to Florida, South America, and Pacific coasts.



SEA URCHIN

Lytechinus variegatus

Average size 2 inches; largest 3½ inches; edible.

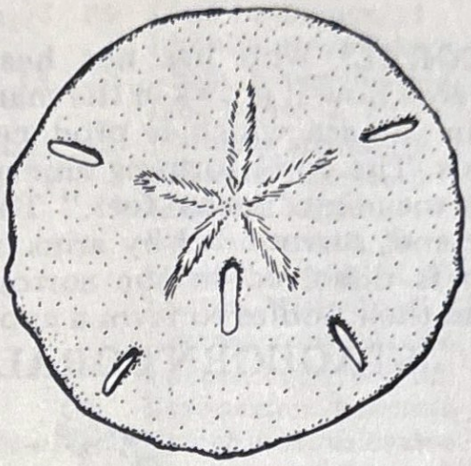
Spines are purple in this species, although directly related Sea Urchins are green and some red. They are quite plentiful and populate the waters of all oceans to great extent. They are the bane of existence to divers. Resemble a tennis ball covered with spines which can assume a waving motion.

Greatest purpose of the nature cycle for Sea Urchins is to feed the millions of other creatures. A female will produce and discharge in the water over 20,000,000 eggs a year. Only a microscopic portion develop, the rest are eaten by sea life.

The male discharges an equal abundance of matter into the water, which is white in color as contrasted to the female's deep orange colored eggs. The sex products come from five large gonads in the upper part of the body cavity. In many parts of the world natives eat these, either raw or cooked. Some eat them on the spot, inserting a finger into the cavity, bring out the gonads, and devour them, unwashed.

Native to all oceans.

OTHER SEA LIFE



SAND DOLLAR

Mellita quinquiesperforata

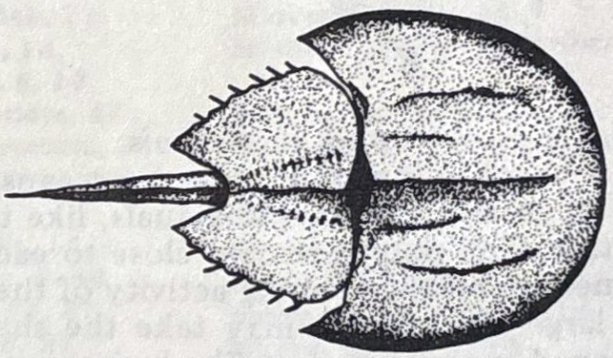
Also called KEYHOLE URCHIN.

Average size 3 inches; largest 5 inches; non-edible.

Dark, purple-brown, but turns green when taken from water and dead shells are dull white.

A flat, thin shell with five slits which resemble a keyhole. It is covered above and below with minute velvety spines. A delicate design, like the petals of a flower, is etched on the under surface — from this tube feet protrude, enabling the animal to breathe and to move about. The spines also aid movement. It does not seem able to right itself if turned on its rounded side. The mouth is centered on the underside.

Found in lagoons or sandy beaches. Native to Florida and the West Indies.



HORSESHOE CRAB

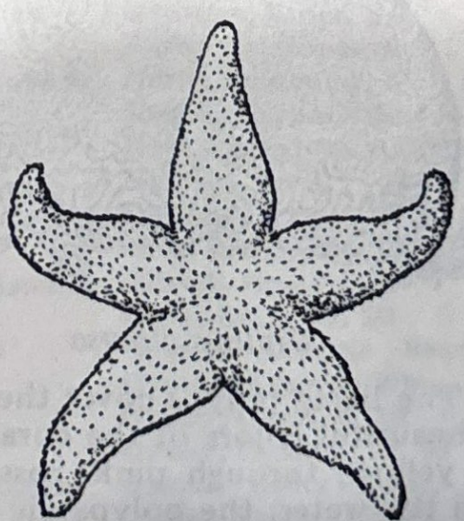
Limulus polyphemus

Average size 6 inches; largest 14 inches; one authority claims 20; non-edible.

Light buff or brown.

There are two large compound eyes rather far apart on the upper side of the shell and two small simple eyes close together on the middle line — near the front border. Below the upper shell is the abdomen with six pairs of spines. Plate-like appendages on the abdomen act as breathing organs, though the first pair, overlapping, act as a cover. There are five pairs of legs ending in pincers, and one pair with narrow plates forming a cone to help the crab push its way through sand and mud.

Native from Nova Scotia to Florida.



COMMON STARFISH

Echinaster sentus

Average size 3 inches; largest 7 inches; Non-edible.

The most representative of the Starfish is the *Phylum enchinoderma*, divided for study into five classes, each with various branches.

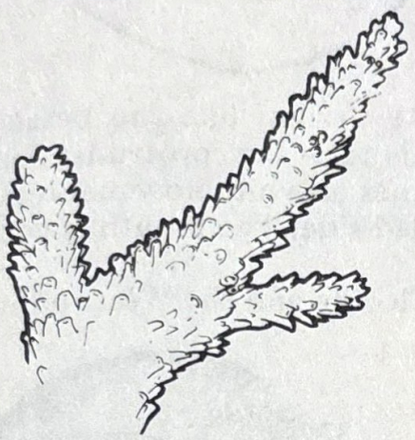
All are five-pointed, or pentagonal, that is, they have at least that many arms. Some are found with more than five arms. Spines cover the body in a mosaic pattern on top. They have no head, but tiny eyes at the ends of the arms — and can lead with any of them, in movement. They grow a new arm if one is knocked off.

Found on intertidal sand flats. Universal to all oceans.

OTHER SEA LIFE

CORAL! Who has not heard the word and been fascinated by it and wondered how it grows in the many sizes and shapes? Coral is a limestone formation in the sea which is produced by the activity of billions of tiny jelly-like animals. The coral forming animals are known as coral "polyps" from the Greek words meaning "many feet." They are sac-like in form. The mouth is at the upper end, surrounded by arms or tentacles. Coral polyps can take the calcium, which is dissolved in the surrounding seawater, and deposit it beneath and around their bodies to form a cup or calyx of limestone.

STAGHORN CORAL



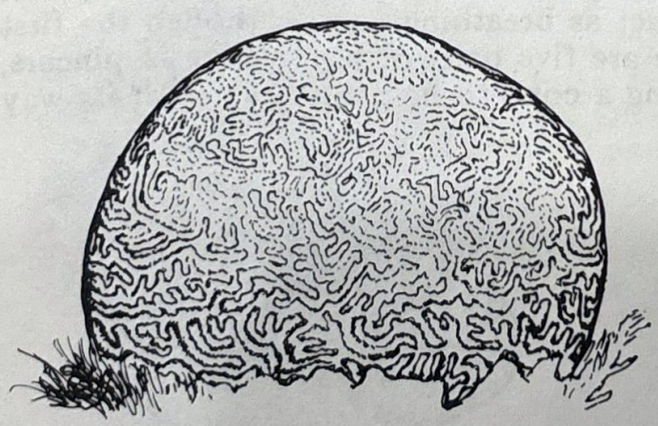
Acropora cervicornis

FINGER CORAL

Porites porites

Coral polyps reproduce by means of eggs and also by budding. In this way they grow off other individuals, like themselves, just as branches grow to form a tree. The polyps remain close to each other and thus form colonies. The combined limestone forming activity of these colonies often produces a coral mass of a large size. These may take the shape of small irregular crusts, large dome-shaped masses, or tree-like branching structures, varying from small clusters to huge towering growths.

BRAIN CORAL



Diplora clivosa

LACE GORGONIA

Gorgonia ventalina

The living polyps cover the outside of these masses and are responsible for the beautiful colors of the coral reef, ranging from shades of tan, brown, orange and yellow, through pink, rose, purple, and green. When the coral is removed from the water, the polyps die and, if washed off, leave behind the snowy white limestone "skeleton." The Gorgonias are in the Coral family.

There are no coral reefs on the East American coast NORTH of Florida and Bermuda. Small patches of a species of coral are found as far north as New England, and some growths of certain coral even extend to the Arctic Circle. In the deep sea, small specialized coral species are also found. The reef-forming coral polyps will not live in waters colder than 65 degrees Fahrenheit.

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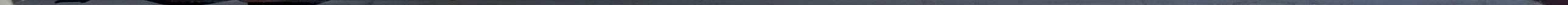
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